



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Monday, August 19, 2019
WELL WORK PERMIT
Vertical / New Drill

MOUNTAINEER STATE ENERGY, INC.
1603 LBJ FREEWAY, SUITE 300

DALLAS, TX 75234

Re: Permit approval for APLIN-DUVALL 351 REV.
47-035-03030-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

Operator's Well Number: APLIN-DUVALL 351 REV.
Farm Name: WILLIAM AND DENNISE DU⁺
U.S. WELL NUMBER: 47-035-03030-00-00
Vertical New Drill
Date Issued: 8/19/2019



west virginia department of environmental protection

Oil and Gas Conservation Commission
601 57th Street SE, Charleston, WV 25304
304-926-0499 Ext 1274

Barry K. Lay, Chairman
dep.wv.gov

August 19, 2019

Department of Environmental Protection
Office of Oil and Gas
Charleston, WV 25304

RE: Application for Deep Well Permit – API #47-035-03030

COMPANY: Mountaineer State Energy, Inc.

FARM: William and Dennise Duvall

Aplin-Duvall #351-A

COUNTY: Jackson

DISTRICT: Grant

QUAD: Rockport

The deep well review of the application for the above company is **Approved to drill to Oriskany for completion.**

The applicant has complied with the provision of Chapter 22C-9, of the Code of West Virginia, nineteen hundred and thirty-one (1931), as amended, Oil and Gas Conservation Commission as follows:

1. Comments to Notice of Deviation filed? NA
2. Provided a certified copy of duly acknowledged and recorded consent and easement form from all surface owners? NA
3. Provided a tabulation of all deep wells within one mile of the proposed location, including the API number of all deep wells: None
4. Provided a plat showing that the proposed location is a distance of 400+ feet from the nearest lease line or unit boundary and showing the following wells drilled to or capable of producing from the objective formation within 3,000 feet of the proposed location.

Sincerely,

Susan Rose
Administrator

MOUNTAIN STATE ENERGY

*WELL #351-**A***

Aplin Heirs Lease

Grant District , Jackson County WV

SITE SAFETY PLAN

4-7-16



8-1-19

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Directions to Wellsite #351:COORDINATES TO LEASE ROAD ENTRANCE: 39.004008 , -81.602772COORDINATES TO WELL SITE (NAD 83): 39.004593, - 81.602583**DRIVING DIRECTIONS TO LEASE ENTRANCE (Ripley WV):**

Via Rt.21/Parkersburg Road: From Ripley At the Intersection of Rt 21/Parkersburg Road and Rt. 33 , Continue North onto Rt.21/Parkersburg Road for 7.5 mile. Stay right onto Rt.21/Parkersburg Rd for 5.5mile and turn Left onto McGraw Road. Travel McGraw Run Road for 2.9 mile. Stay left on McGraw Run and Continue 0.2mile to Location entrance on the left.

Via I-77 : From Ripley Exit Continue on I-77 North for 16 mile to Exit 154 (Medina Road). Turn Right and follow Medina/Nessel Run road for approx. 3.5mile. Turn Left onto Rt.21/Parkersburg Road and follow 0.5mile to McGraw Run Road on left. Turn left and travel McGraw Run Road for 2.9 mile. Stay left on McGraw Run and Continue 0.2mile to Location entrance on the left.

DRIVING DIRECTIONS TO LOCAL HOSPITALS (ER'S) FROM WELL SITE:

WV 25271 Jackson General Hospital: (304 372 2731)
122 Pinnell Street Ripley

Directions from Well #351: At lease road entrance t/r on McGraw Road and travel 0.2mile, Stay right onto McGraw Run and follow 2.9mile to Rt.21. Turn Right onto Rt.21 South and follow 5.5mile. Stay left and continue 7.5mile on Rt.21 South. To intersection of Rt 21 and Rt 33 in Ripley WV. T/R on Rt 33 West and follow for approx . 1.2 mile (go past I 77) and T/R on Clay Lick Rd. Follow for 0.2 mile to Hospital on Left.

Camden Clarke Memorial Hospital: (304 424 2111)
800 Garfield Ave Parkersburg WV

Directions From Well #351 : At lease road entrance t/r on McGraw Road and travel 0.2mile, Stay right onto McGraw Run and follow 2.9mile to Rt.21. T/L on Rt 21 North for 13.2 mile and merge onto I77N/W Virginia 2N. Follow for 11.3miles. Take Exit 173 toward Camden Avenue/Downtown/WV 95 and follow for 0.3mile. T/L onto Point Dr and follow 223'. Take 1st left onto Camden Ave and Travel 2.5mile – T/R on E St Bridge/W Virginia and Continue 0.6 mile. T/L on Old US 50 and Travel 1 mile, T/L to stay on 50 and Travel 381' to destination on Right.

CAMC General: (304 388 6000) – Emergency Services
501 Morris St Charleston WV 25301 ----- Heliport (304 348 6002)

CAMC Memorial : (304 388 4170) – Emergency Services
3200 McCorkle Ave SE Charleston WV 25304

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Contacts, Schedules, and MeetingsA. 24 hour Emergency point of contact for Mountaineer State Energy (1-800-)B. List of telephone numbers:

OPERATOR:			
Mountaineer State Energy Office (24 hr contact)			

KEY CONTRACTORS:			
BBU Environmental:	Spill Response	(304) 372-8192	1-866-925-8192
Safety Kleen	Spill Response	304 755 4279	
Enviroprobe	Spill Response	304 776 6717	
R&R Well Service	Spill Response	304 531 4822	
Haz-tech Environmental	Spill Response	800-304-4286	
Mcjunkin Redman	Pipe/Equip Venders	304-562-5724	
Miller Supply	Pipe/Equip Venders	304-595-5105	740-373-6806
Hildreth Supply	Pipe/Equip Venders	304-927-2170	
TekSolv	H2S Monitoring	304-472-4800	304-472-0007
Drilling contractor TBD	Drilling Contractors		
Drilling contractor TBD	Drilling Contractors		
Baker Hughes	Cementing/pumping	1-304-624-9802	
Haliburton	Cementing/pumping		
Schlumberger	Cementing/pumping	1-304-269-1939	
Universal	Cementing/pumping	1-304-473-8960	
C&J	Cementing/pumping		1-276-679-5860
Weatherford	Wellhead/BOP/control	1-304-884-8103	1-724-754-9439
Universal Wellhead	Wellhead/BOP/control	1-740-492-0403	
Boots and Coots	Wellhead/BOP/control	1-800-blowout	
Wild Well Control	Wellhead/BOP/control	1-281-784-4700	1-713-882-8841

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DEP OFFICE/INSPECTORS			
WVDEP	Env./Regulatory	1-304-926-0499	
James Martin (chief)	Env./Regulatory	ext 1654	
Jamie Stevens (Putnam)	Env./Regulatory	304-206-7775	
Jeremy James (Cabell)	Env./Regulatory	304-951-2596	
Terry Urban (Kanawha)	Env./Regulatory	304-549-5915	
Joe Taylor (Roane)	Env./Regulatory	304-380-7469	

LOCAL EMG. RESPONSE			
Putnam County	Emergency Management	304-586-0246	
HealthNet Inc	Heli Unit	304-388-7239	
Winfield Fire Dept.	Fire Emerg.	304-586-0246	
Milton Fire Dept.	Fire Emerg.	304-743-6319	
Jackson Fire Dept	Fire Emerg.	304-373-2208	
Spencer Fire Dept	Fire Emerg.	304-927-1099	
Putnam EMS	AMB /EMS	304-586-0248	
Cabell EMS	AMB /EMS	304-526-9797	
Jackson EMS	AMB /EMS	304-373-2208	
Spencer EMS	AMB /EMS	304-927-2822	
Putnam	State Police	304-586-2000	
Cabell	State Police	304-528-5555	
Jackson	State Police	304-372-7850	
Roane	State Police	304-927-0950	
Putnam	Sherriff Office	304-586-0256	
Cabell	Sherriff Office	304-743-1594	
Jackson	Sherriff Office	304-373-2290	
Roane	Sherriff Office	304-927-2540	

LOCAL ER PERSONNEL			
CAMC General	(Trauma 1)	304-388-7498	
St. Mary's Medical	(Trauma 1)	304-526-1111	

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C. NOTIFICATION OF H2S GAS PRESENCE

Prior to any drilling operations taking place, rig personnel and key contractors must be trained or show current certificate of H2S hazard training. H2S gas monitors strategically located will notify site personnel to begin evacuation to the predetermined safe zone or muster area.

A wind sock and/or flags will be utilized on location to identify wind direction. A safe zone upwind and away from the well will be established at the beginning of each tour. Personnel are trained to evacuate the well and gather at this safe zone immediately at the first sound of an H2S gas alarm.

After personnel are located at the muster safe area, the onsite supervisor will make the proper offsite notifications. The DEP Office of Oil and Gas will be notified by a phone call to both the local inspector and the emergency number. The local emergency responders may also be notified of the detection.

In the event of an H2S emergency, the onsite supervisor shall use his discretion alongside of Emergency responders as to the severity of the event and whether the local community should be notified. Notification of the residential area may be done in the form of a phone call (see list of contacts -pg.25) or a door to door visit. Mountaineer State Energy also recognizes that in most emergency situations the local emergency responders will coordinate any notification or evacuation procedures for the community and Mountaineer State Energy will work closely with such emergency responders in their efforts.

D. PRE-SPUD MEETINGS

Prior to drilling operations, an onsite "Pre-Spud" meeting will be held to address operations and the Site Safety Plan. This meeting shall include the Mountaineer State Energy Drilling/Completions Manager, the staff or contracted site supervisor(s) ("Company Man"), any staff or contracted safety personnel, key contractors to the drilling process, the contracted rig's key personnel, DEP regional inspector or representative. Local emergency response personnel may also be invited to the pre-spud meeting. All attending personnel will be documented. Contractors will be provided copy of and instructed to go over the site safety plan with their respective individual employees.

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E. WELL SITE SAFETY MEETINGS

As a general rule, safety meetings should be held whenever necessary. Pre-Job Safety Analysis (JSAs) will be completed before beginning each shift and with any change in work. A safety meeting is to be conducted prior to the start of a specific task with the workers/contractors who may be involved in the task.

LOG ATTENDANCE

Safety meeting topics and attendance will be recorded on the log sheet. The safety meeting log sheets will be copied and retained in Mountaineer State Energy's permanent files.

SITE CHECK-IN & CHECK-OUT

All visitors, service personnel, and vendors to the 351 well site will be instructed to check in with the site supervisor for authorization to remain at or perform work at the well site. Drilling personnel under the responsibility of the driller on duty will be required to check in on the drillers daily log book.

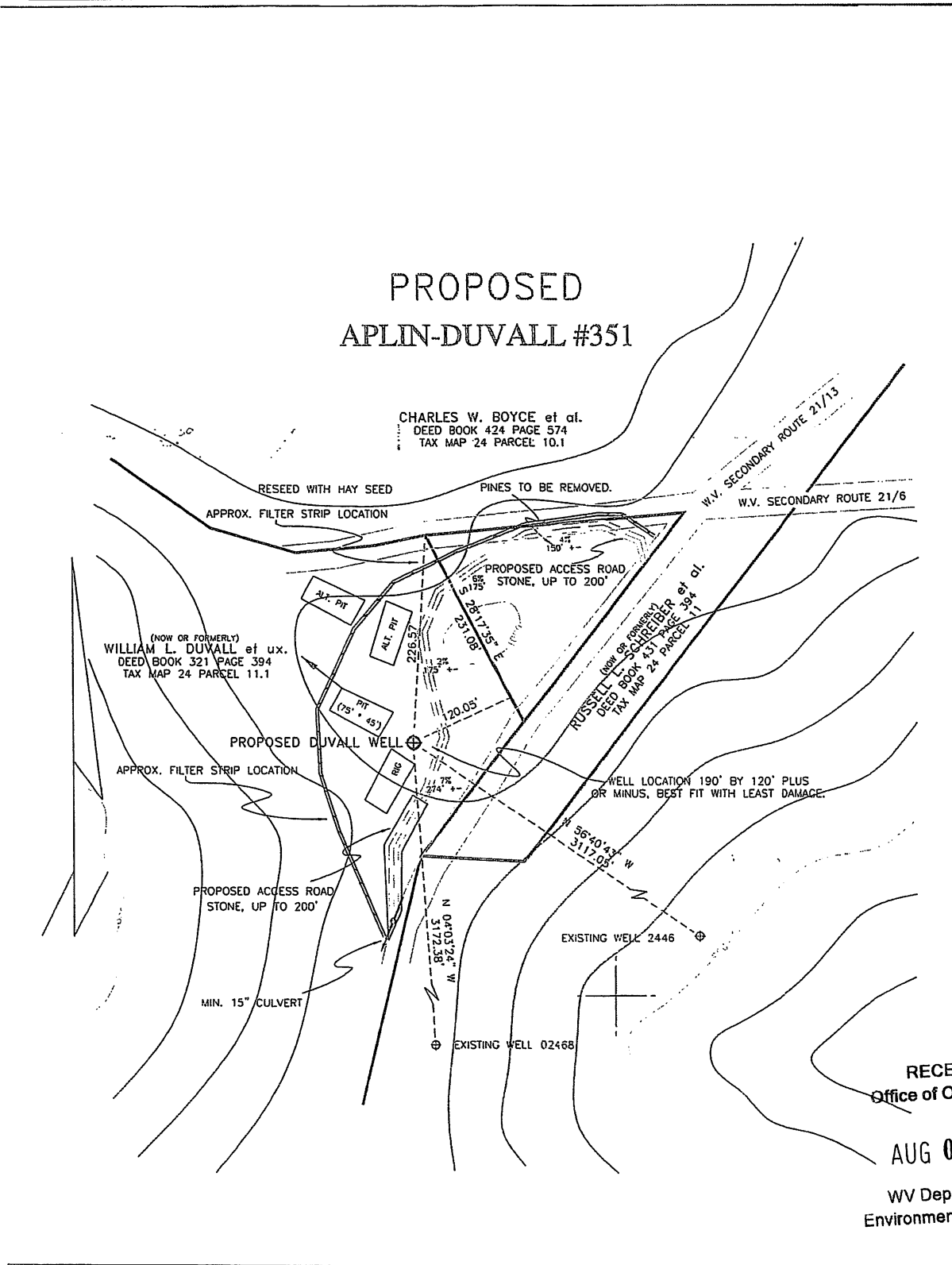
STOP WORK AUTHORITY

Stop Work Authority should be initiated for conditions or behaviors that threaten danger or imminent danger to person(s), equipment or the environment. Stop Work Authority can be called by anyone that perceives unsafe conditions that may result in an unwanted event.

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2. Maps And Diagrams

A. PLAN VIEW MAP OF LOCATION.



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Mountaineer State Energy

Tree

A5P-EN 7-1/16" 3M x 2-1/16" 3M
(2) 2-1/16" 3M or 5M Gate Valves

2-1/16" 3M or 5M

Tubing Head

11" 3M x 7-1/16" 3M
2-3/8" TC1A-EN Bowl Prep
9" PE Bottom Prep
(2) 2" 3M Ball Valves

7-1/16" 3M

2-3/8" TC1A-EN Tubing Hanger
w/ 2" BPV Pep

9" x 4-1/2" PE Seal

Casing Head

11" 3M x 7" LTC Thread
C-22 Bowl Prep
(1) 2" 3M Ball Valve

11" 3M

11" x 4-1/2" C-22 Casing Hanger

7"

4-1/2"

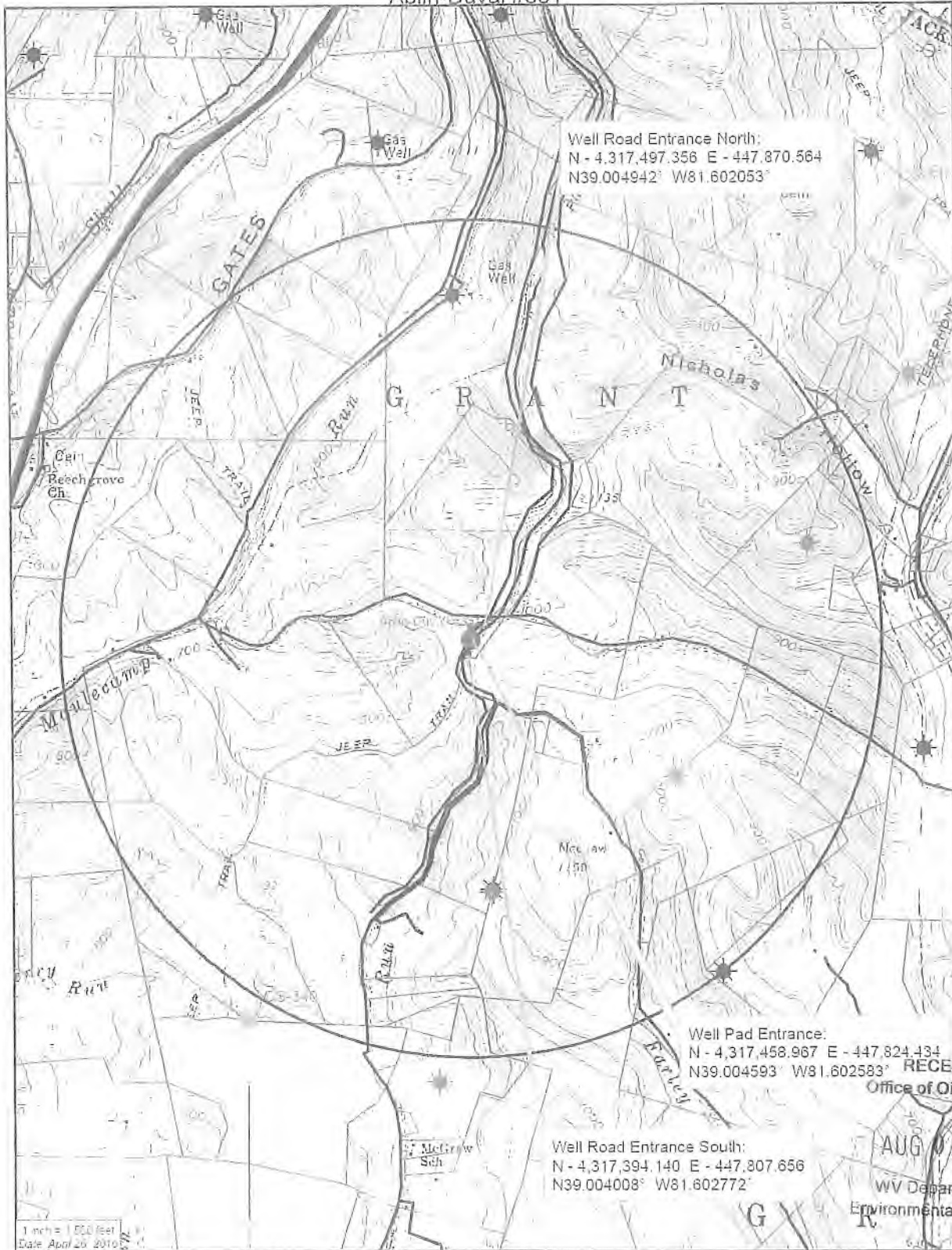
2-3/8"



6
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B. TOPOGRAPHIC MAP OF WELL LOCATION.

Aplin-Duval #351



1 inch = 1,000 feet
Date April 26, 2019

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C. EVACUATION AND NOTIFICATION PLAN

The following describes the procedures for the evacuation of employees and local residents in the event of an incident or emergency at the well site.

SITE WORKERS AND VISITORS

In the case of an incident occurring on a Mountaineer State Energy well site. All employees, contractors / subcontractors will be notified and removed to a predetermined safe area/ muster point. If there are no Mountaineer State Energy representatives on site at the time of the incident, then the evacuation will be managed by the onsite supervisor, contractors and subcontractors. Personnel should remain in the safe area until emergency services arrive and/or further instructions are given by the supervisors or emergency coordinators.

LOCAL RESIDENTS

If an event arises that poses an immediate threat to local residents and the community, Mountaineer State Energy alongside of local emergency services will begin contacting local residents, starting with the closest to the well site and who will most likely to be effected by wind conditions and other factors.

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3. Well Work

A. DESCRIPTION OF DRILLING , COMPLETION OPERATIONS

During air drilling operations , air (primary drilling medium) must be circulated into the well bore as a means to transport new drill cuttings from the bit to the surface. This air is in some cases mixed with a biodegradable soap that has been added and injected into the stream at surface to aide in hole cleaning in the event that a fluid bearing zone be penetrated. This fluid is contained in an impoundment that will be treated and disposed of according to permitted guidelines. During air drilling operations, returns will be taken through the flow line directly to the pit.

In the event that the 351 well is found to have an economically viable reservoir(s), hydraulic stimulation may be used as an operation to enhance production capabilities. Stimulation design will be highly dependent on reservoir data and characteristics. The well is planned to have production casing cemented in place for zone isolation and will utilize bridge plugs and casing perforating guns for any stage work performed.

B. DISTRIBUTION OF THE SITE SAFETY PLAN

Copies of this Site Safety Plan will be located at the Mountaineer State Energy office in Sandyville, WV and at the drilling site. This plan may be accessed electronically by all Mountaineer State Energy employees on the company's shared drive. All Employees and Contractors/ Subcontractors are to abide by the provisions of this Plan and are required to participate in its implementation.

This Site Safety Plan will also be shared with DEP/^{office} of Oil and Gas and external entities such as The County Office of Emergency Management within at least 7 days prior to earth disturbances and or well work.

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4. Chemical Inventory & MSDS

A. MATERIAL SAFETY DATA SHEETS

Anticipated MSDS Sheets for the drilling and completion activities can be provided upon request .

B. MSDS AVAILABILITY

MSDS sheets will be kept on location at the company house and/or with the company man including the rig doghouse. Any contractors that bring hazardous materials on site must provide a MSDS for such. The onsite supervisor will be responsible for ensuring that all MSDS sheets are obtained and are easily accessible in case of an emergency.

C. DRILLING MUD INVENTORY

It is anticipated that the well #351 will utilize compressed air as a means of transporting drill cuttings from the bit to the surface. There will not be a drilling mud inventory kept onsite.

5. BOP And Well Control

A. BOP EQUIPMENT AND CASING HEADS:

- 3M Annular BOP to be installed for the 8 ¾" hole section.
- 7 1/16" 5M Screw on Casing head.
- 7 1/16" 3M Annular BOP to be installed for the 6 3/8" hole section.

B. BOP TESTING PROCEDURES:

- Annular Preventers will be tested upon installation, then at least once every 21 days. Testing procedure will use water or air as medium and consist of a low pressure (300psi) test and a high pressure (70% of WP or 80% Casing Burst) . Pressure will be held for 30 min.

C. BOP EQUIPMENT AND INSTALLATION SCHEDULE:

- After setting and cementing 9 5/8" surface casing – a 3000psi annular BOP is to be flanged directly to the casing.
- After setting and cementing 7" Intermediate Casing, the well will be fitted with a screw on 1/16" API 5000psi wellhead. A 7 1/16" 3000psi Annular BOP will be flanged up to wellhead and tested according to procedure before drilling bottom hole section.

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D. NAMES OF WELL CONTROL TRAINING

Throughout operations, the following Mountaineer State Energy Employees shall have and maintain Well Control Certification. Any on site consultants hired to oversee drilling or completions must have current Certification of Well Control Training.

Names		Expired Date
Drilling Manager	Operator	
Drilling Superintendent	Contractor	
Drilling Engineer	Operator	
Completions Superintendent	Operator	
Rig Manager / Supervisor	Contractor	
Rig & Drilling Safety	Operator	

E. SYSTEM OF MAINTAINING DETAILED RECORDS

A detailed drillers log will be maintained at all times.

Including but not limited to:

- o Lost Circulation
- o Presence of hydrogen sulfide gas (H₂S)
- o Fluid entry
- o Kicks
- o Abnormal pressure

F. NOTIFICATION OF THE OFFICE OF OIL AND GAS

The WV DEP Office of Oil and Gas will be immediately notified of the presence of hydrogen sulfide gas above 10 ppm, significant kicks, or blow out events.

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G. WELL HEAD ASSEMBLY (Completion)

Upon Completion of the well it is anticipated that a 4.5" x 2 3/8" wellhead is to be installed on the 4.5" casing and 2 3/8" tubing will be ran as a production string.

H. WELL KILLING PROCEDURE

The 351 Well is planned to be drilled in an underbalanced environment using compressed air for drilling medium. Natural gas shows while drilling will be taken through the surface equipment in a controlled manner. It is not anticipated that there will be large natural shows of gas that would warrant the well to be killed. If however, circumstances arise that would deem it necessary to kill the well, a pumping unit and all necessary materials will be ordered out to load the hole and kill the well.

IN CASE WELL WOULD NEED KILLED

MSE WILL HAVE AT THE WELL SITE

210 BARRELS OF FRESH WATER

20 BAGS OF KCL

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6. HYDROGEN SULFIDE (H₂S)

Based on the geological records and previous experience of well drilling to the Oriskany Sand in this particular area of Jackson County, H₂S is not known to be present in hazardous concentrations. However during the penetration of any potential H₂S bearing zones proper equipment and precautionary measures will be utilized.

A. DETECTION, MONITORING AND WARNING EQUIPMENT

Fixed monitors are present in areas where H₂S might be encountered such as rig floor, sub base/cellar, tanks and other areas of possible concern. Portable monitors will also be available.

Monitoring equipment shall be calibrated by and in accordance with the supplying contractor's guidelines. The monitor will be equipped with visual and audible alarms located where the alarms can be seen or heard throughout the working areas. Wind socks and or streamers will be mounted at the well site to indicate wind direction so personnel can quickly predetermine which safe area to evacuate to in case of an alarm.

B. EMPLOYEE H₂S TRAINING

Prior to any drilling operations taking place, all rig personnel and key contractors must be trained or show current certificate of H₂S hazard training.

At the first sound of an H₂S gas alarm, personnel will secure the well, observe the wind direction and muster to the appropriate safe area. A safe zone away from the well will be established at the beginning of each tour. Employees will stay at the safe area until specially trained personnel ensure that no H₂S is present before returning to the work area.

C. NOTIFYING THE OFFICE OF OIL AND GAS

In the event that H₂S is encountered, after all personnel have gathered in the safe zone, the onsite supervisor will take a head count, assess the situation, and then proper offsite notifications shall be made. The DEP Office of Oil and Gas will be immediately notified of any H₂S event in excess of 10ppm.

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D. PROTECTION ZONES

SIGNAGE

The use of caution and danger signs and labels may be used to alert employees and the general public to operations where there is a potential for exposure to H₂S.

Safe Zone (Muster Area) signs will be placed upwind and away from the work site. The JSA meeting at the start of each shift will establish where the Safe Zone areas are located.

WIND SOCKS

A wind sock and/or flags will be utilized on location to identify wind direction and placed where wind movement is unobstructed, elevated and rotating freely. Personnel are trained to evacuate the well and gather at this safe zone immediately at the first sound of an H₂S gas alarm.

E. LIST OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

Fixed monitors/alarms located in areas of concern and supplemental personal monitors will be maintained and used during the drilling process. In an event that is in an unexpected interval, personnel on site will be trained to cease the current operation safely, shut in the well (if evaluated and deemed necessary), and evacuate all personnel to the pre-determined safe zone at the first signal of H₂S from the alarms. At this time Mountaineer State Energy personnel will assess the hazards, bring in H₂S Specialist and PPE to mitigate the situation.

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9. Deep Well Additional Requirements

A. LIST OF ANTICIPATED INTERVALS

<i>Formation</i>	<i>Lithology</i>	<i>Depth</i>	<i>Subsea</i>
Salt Sand	Sand	1771	-788
Big Lime	Limestone	1923	-940
Big Injun	Sand	2013	-1030
Berea	Sand	2441	-1458
Devonian Shale	Shale	2443	-1460
Huron Section	Shale	3763	-2780
Rhinestreet Section	Shale	4793	-3810
Marcellus Section	Shale	5023	-4040
Onandaga	Limestone	5063	-4080
Oriskany	Sand	5178	-4195
Helderberg	Limestone	5208	-4225

B. DETAILED CASING AND CEMENTING PROGRAM

TYPE	SIZE	GRADE	WEIGHT	DEPTH	FILLUP	CMT
Conductor	13 3/8"	J55	45#	42'	CTS	Class A
Surface	9 5/8"	J55	36#	250'	CTS	Class A
Intermediate	7"	J55	23#	2700'	CTS	Class A
Production	4.5"	J55	11.6#	5200'	3000'	Class A
Tubing	2 3/8"	J55	4.7#	5200'		

C. FLARING ACTIVITIES

Drilling operations through the Onandaga and Oriskany intervals, and until TD is reached, will utilize a propane pilot situated at the end of the 7" flow line. This propane pilot will be used to flare any gas produced to the surface. The flow line will remain secured /anchored through the entirety of drilling operations. Any significant flaring operations occurred while drilling throughout these intervals will be immediately reported to the appropriate local emergency services. A 50' radial area around the propane pilot will be cleared of any flammable materials.

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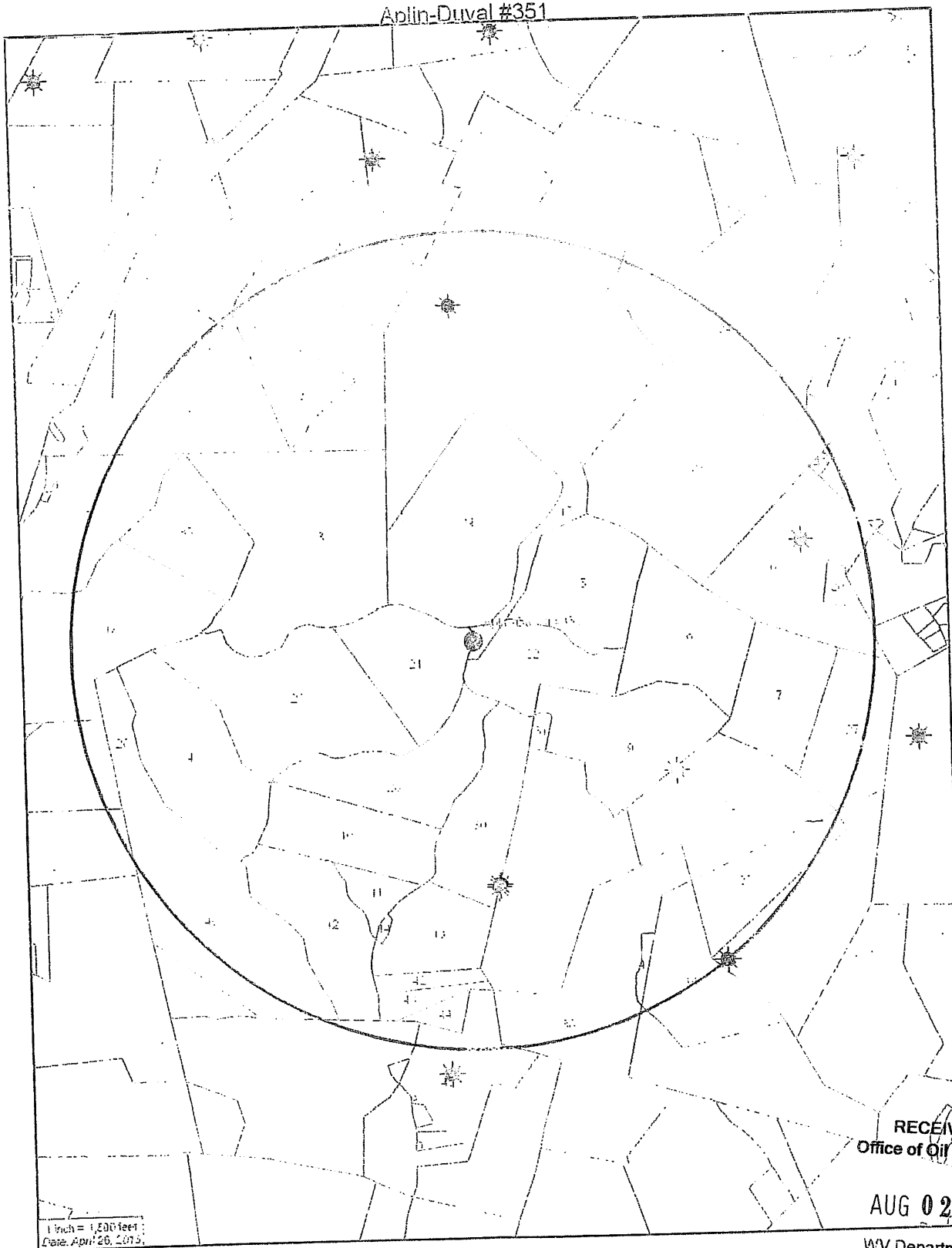
D. LIST OF RESIDENTS WITHIN ONE MILE RADIUS

Tract ID	County	District	Map	Parcel	Owner	Contact	Address
1	Jackson	Grant	18	18	George T. & Anna Harless	304-595-3635	281 Little Creek Road, Chelyan WV25035
2	Jackson	Grant	24	2	George T. & Anna Harless	304-595-3635	281 Little Creek Road, Chelyan WV25035
3	Jackson	Grant	24	9	Tim & Patricia Boyce	304-273-3228	1174 Maul Camp Road, Ravenswood WV 26164
4	Jackson	Grant	24	26	William L. Duvall	304-744-1209	724 Green Rd. South Charleston WV 25309
5	Jackson	Grant	24	28	Russell & Tamara Schreiber	740-374-2822	515 Front Str., Marietta OH 45750
6	Jackson	Grant	24	30	John S. & Linda Wiggins	Update	872 Mariah Road, Sandyville 25275
7	Jackson	Grant	24	30.1	Fred Johnson	304-273-4691	486 Mariah Road, Sandyville 25275
8	Jackson	Grant	24	42.4	Micheal & Sherry Stevens	304-273-2178	2864 McGraw Run Road, Sandyville WV 25275
9	Jackson	Grant	24	44	James Trivett & Sallie Guffanti	304-273-2926	2880 McGraw Run Road, Sandyville WV 25275
10	Jackson	Grant	24	39	Fred & Carolyn Keen	304-984-1524	2008 Cameron Lane, Sissonville WV 25320
11	Jackson	Grant	24	38.1	Penny Abbott & Jeffrey Nazum	304-273-3009	2205 McGraw Run Road, Sandyville WV 25275
12	Jackson	Grant	24	38	Dewain Errol & Virginia Boyce	304-273-2965	2047 McGraw Run Road, Sandyville WV 25275
13	Jackson	Grant	24	42	Donald & Deborah Carter	304-273-0098/304-440-4399	515 Douglas Ave., Ravenswood WV 26164
14	Jackson	Grant	24	42.2	Donald & Deborah Carter	304-273-0098/304-440-4400	515 Douglas Ave., Ravenswood WV 26164

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OIL AND GAS CONSERVATION COMMISSION
AND
OFFICE OF OIL AND GAS

Policy Statement

Deep Well Drilling Procedures
And Site Safety Plan Requirements

The drilling of wells to new and untapped producing horizons has increased significantly in the past year. The recent trend involves the drilling of wells to depths of 10,000-14,000 feet with the potential for encountering very high pressures and volumes.

The Oil and Gas Conservation Commission and the Office of Oil and Gas have the required authority and believe that it is necessary to issue this Policy setting forth minimum requirements for necessary equipment and procedures that must be addressed in a Safety Plan ("Plan") which shall be submitted and approved prior to drilling a deep well. A deep well shall be any well which meets the definition as provided for in Chapter 22C, Article 9 of the West Virginia Code.

A site specific Safety Plan must be submitted with each deep well application. Approved Plans shall be maintained and available at the drilling rig at all times. The Plan shall, at a minimum, address the following items:

Siting Requirements

1. The Plan shall provide a map indicating the location, access road, pit, flare line and nearby dwellings, and take into consideration the prevailing wind direction.
2. Topographic map of well location.

Site Safety Plan

1. A pre-spud meeting shall be held prior to beginning drilling operations and include personnel to be employed and involved in the drilling operations and including the district oil and gas inspector or

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other designated Office of Oil and Gas representative. The Plan shall list all persons involved in the pre-spud meeting.

2. The Plan shall provide a system for the check in of personnel and visitors to the drilling location to allow for an accurate headcount of personnel at any time.
3. The Plan shall include an evacuation plan for the removal of personnel from the drilling location and residents in the surrounding area should the need arise.
4. The Plan shall include a schedule for conducting safety meetings on a regular basis.
5. The Plan shall include a list of the nearest emergency response personnel and phone numbers for each.

Casing Requirements

1. The Plan shall provide details on the location of all freshwater, saltwater, oil and gas producing, hydrogen sulfide producing, "thief", and high pressure and volume zones known to the operator.
2. The Plan shall include a detailed casing and cementing program that employs a minimum of three strings of casing which are sufficient weight and quality for the anticipated conditions to be encountered. The casing setting depths shall be sufficient to cover and seal off those zones as identified above.

BOP Requirements

1. The Plan shall provide a listing of all BOP equipment with types, sizes and ratings to be utilized and available during the drilling of the deep well.
2. The Plan shall provide a procedure and schedule for testing of BOP equipment.
3. The Plan shall provide a schedule of when BOP equipment is to be installed and operational. BOP equipment shall be installed on the innermost string of casing after the surface casing.
4. The Plan shall include a listing of all approved BOP trained and actively certified personnel that will be involved in the drilling operation to assure that a trained person is present during the drilling operations.

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5. The Plan shall include a system of maintaining a detailed record of significant drilling events such as lost circulation, hydrogen sulfide gas, fluid entry, abnormal pressures, etc. The district oil and gas inspector or the designated Office of Oil and Gas representative shall be notified as soon as possible of any unusual drilling events such as hydrogen sulfide gas or large kicks that occur during drilling operations. Any encounter of hydrogen sulfide gas shall require mandatory immediate notification to the Office of Oil and Gas.
6. The Plan shall include a schematic and description of the wellhead assembly to be placed on the well upon completion.

Well Flaring Operations

1. The Plan shall specify the size, construction and length of the flare line and the method that will be used to anchor the flare line along with a description of the choke assembly.
2. The Plan shall specify the system to be used for lighting the flare and what will serve as back-up igniters. All gas diverted through the manifold shall be burned. Notification shall be given to the local fire department prior to lighting of the flare if possible, otherwise as soon as possible.
3. The plan shall specify the minimum distance of clearing of flammable material beyond the end of the flare line.

Well Killing Operations

1. The Plan shall include an inventory of all materials that will be on-site for the mixing of mud. Inventory shall include the amount of mixed mud, mixed mud weight, amount of additional weighting material such as barite or bentonite and the volume of water for mixing.
2. The Plan shall specify the number and type of mixing units that will be utilized for the mixing of mud.

Hydrogen Sulfide Operations

1. The Plan shall specify the equipment and methods to be utilized for the monitoring, detection and warning of hydrogen sulfide gas during drilling operations and shall specify the location of the monitoring and detection equipment.

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2. The plan shall provide a statement of the training to be provided or that has been provided for all personnel that will be involved in the drilling operations.
3. The plan shall specify the personal protection equipment that will be maintained on location.
4. The Plan shall specify the method of notification of hydrogen sulfide presence and how access will be controlled.

Notification

1. The Plan shall provide a list of names, addresses and telephones number of all residents, businesses, churches, schools and emergency personnel within a one mile radius, that may be affected by specific events during the drilling process. Such events may include the presence of hydrogen sulfide, flaring, etc.

Plan Modifications

1. The Office of Oil and Gas must approve all changes and modification to previously approved plans.

Approved: Barry K. Lay
Barry K. Lay, Chairman & Commissioner

Date: 10/18/12

Approved: James A. Martin
James A. Martin, Chief - Office of Oil and Gas

Date: 10-22-12

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PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code §22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR 4-19.1.c, if the operator is unable to sample and analyze any water well or spring with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours
7. Well work activities shall not constitute a hazard to the safety of persons.
8. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Mountaineer State Energy Inc. 45650 Jackson Grant Rockport
Operator ID County District Quadrangle

2) Operator's Well Number: # 351 ~ A 3) Elevation: 983'

4) Well Type: (a) Oil _____ or Gas X _____
 (b) If Gas: Production X / Underground Storage _____
 Deep X / Shallow _____

5) Proposed Target Formation(s): Oriskany Proposed Target Depth: 5,200'
 6) Proposed Total Depth: 5,150' Feet Formation at Proposed Total Depth: Oriskany
 7) Approximate fresh water strata depths: 200, 400, 500, 850
 8) Approximate salt water depths: 1400 - c-1800'

9) Approximate coal seam depths: N/A

10) Approximate void depths, (coal, Karst, other): N/A

11) Does land contain coal seams tributary to active mine? N/A

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)
Drill & Complete Vertical Oriskany Well, If salt water encountered @ 1800; Switch to fluid and mud pump to complete intermediate last 400'

13) CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE	INTERVALS	CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	13 3/8"	J55	45#	42	1 joint of 42'	RECEIVED Office of Oil and Gas
Fresh Water	9 5/8"	J55	36#		950	AUG 2 2019 CTS
Coal	N/A				..	WV Department of Environmental Protection CTS 400 SX
Intermediate	7"	J55	23#	2300	2300	
Production	4 1/2"	J55	11 1/2#	5200	5200	3000 Fill up 2 3/8
Tubing	2 3/8"	J55	4.7 #	5200		
Liners						

Packers: Kind: _____
 Sizes: _____
 Depths Set _____

[Handwritten Signature]
8-1-19

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 7-30-19
API #: 035-03029

Farm name: Aplin-Duvall Operator Well No.: 351

LOCATION: Elevation: 992 Quadrangle: Rockport

District: Grant County: Jackson
Latitude: _____ Feet South of _____ Deg. _____ Min. _____ Sec. UTM-N-4, 317, 457.8
Longitude _____ Feet West of _____ Deg. _____ Min. _____ Sec. UTM-E- 447, 819.7

Company:

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 27 Sandyville, WV 25275	13 3/8"		42	8 Sacks
Agent:				
Inspector: <u>Joe Taylor</u>	9 5/8"		550	CTS
Date Permit Issued: <u>5-20-19</u>				
Date Well Work Commenced: <u>7-16-19</u>				
Date Well Work Completed: <u>7-29-19 Stopped</u>				
Verbal Plugging: <u>7-29-19</u>				
Date Permission granted on: <u>7-29-19</u>				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>2374'</u>				
Total Measured Depth (ft): <u>2362</u>				
Fresh Water Depth (ft.): <u>830</u>				
Salt Water Depth (ft.): <u>-----</u>				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>N/A</u>				
Void(s) encountered (N/Y) Depth(s) <u>-----</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow N/A MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure N/A psig (surface pressure) after N/A Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

[Signature] Signature 8-1-19 Date

47-035-03030

INSPECTORS PERMIT SUMMARY FORM

PAGE 1

GPS YES NO

DATE STARTED/LOCATION: 6-24-2019 API #: 47-035-3029 WELL NO. 351

DRILLING COMMENCED: 7-16-2019 OPERATOR: Mountaineer State Energy Inc.

TD DATE: 7-28-19 DEPTH: _____ FARM: William & Denise Ouyell

WATER DEPTHS 200-400-500-850 COAL DEPTHS N/A

QUESTIONS FOR THIS REPORT ARE IN ACCORDANCE OF WV CODE 22-6-30 AND REGULATIONS 35CSR 4-12.1 AND 35CSR 4-16 AND THE GENERAL WATER POLLUTION CONTROL PERMIT

POINTS ARE TO BE GIVEN UP TO MAXIMUM AS SHOWN BASED ON PERFORMANCE.

1. DID OPERATOR GIVE PROPER NOTICE TO INSPECTOR BEFORE THE FOLLOWING:

A. CONSTRUCTION YES NO (2_PTS) B. DRILLING YES NO (2_PTS) (4 PTS) 4

2. WAS THE TIMBER CUT, STACKED, AND BRUSH USED FOR SEDIMENT BARRIERS BEFORE DIRT WORK STARTED? YES NO (4_PTS) (4 PTS) 4

3. ARE ALL LOCATION AND/OR ROAD BANKS BEING SLOPED? YES NO (4_PTS) (4 PTS) 4

4. CONSTRUCTION:

WERE THE FOLLOWING SEDIMENT CONTROL STRUCTURES PROPERLY INSTALLED/MAINTAINED?

A. ROAD DITCHES (1)_ (2)_ (3)_ (4)_ (5)_ (PTS) B. CROSS DRAINS (1)_ (2)_ (3)_ (4)_ (5)_ (PTS) C. CULVERTS (1)_ (2)_ (3)_ (4)_ (5)_ (PTS) D. CREEK CROSSINGS (1)_ (2)_ (3)_ (PTS) E. DIVERSION DITCHES (1)_ (2)_ (3)_ (PTS) F. BARRIERS (1)_ (2)_ (3)_ (PTS) G. TEMPORARY SEEDING YES NO (10_PTS) POINTS AVAILABLE FOR QUESTION 4: (33 PTS) 33

5. HAS TOP SOIL (IF ANY) BEEN STOCKED PILED? YES NO (2_PTS) (2 PTS) 2

IS THE PIT PROPERLY INSTALLED AND MAINTAINED? YES NO (9_PTS) (9 PTS) 9

7. RECLAMATION:

A. ROADWAY (1)_ (2)_ (3)_ (PTS) B. LOCATION (1)_ (2)_ (3)_ (PTS) C. PITS (1)_ (2)_ (3)_ (PTS) D. PIPELINES (1)_ (2)_ (3)_ (PTS) E. TANK DIKES (1)_ (2)_ (3)_ (PTS) F. API INSTALLED YES OR NO 3 (PTS) G. ADEQUATE SEEDING MATERIALS (1)_ (2)_ (3)_ (PTS) H. WAS SEED BED ADEQUATE (1)_ (2)_ (3)_ (PTS) POINTS AVAILABLE FOR QUESTION 7: (24 PTS) 24

8. WAS RECLAMATION COMPLETED WITHIN:

MTHS OF TD 6_PTS ONLY; MTHS OF TD 12_PTS ONLY; MTHS OF TD 19_PTS ONLY. MAXIMUM POINTS AVAILABLE FOR QUESTION 8: (19 PTS) 19

TOTAL MAXIMUM POSSIBLE SCORE OF 99.

TOTAL RECLAMATION SCORE: 99%

INSPECTIONS :

8-5-19
DATE RELEASED _____
[Signature]
INSPECTOR _____

INSPECTIONS:

Pre spud meeting 7-15-19 / 12:30pm with company reps and
driller = RDR

7-16-19 - set conductor 386 feet c 75 w/cited 8 hours.

7-16-19 - more gravel on county Road.

7-17-19 - on sight at 12:00Am still drilling at 650 Feet

TD Fresh water string - 611 / 250 sacks cement

Set 9 5/8" = 582 feet / 13 barrel return / plus down 2:00pm

7-22-19 - Red Rock sluffing / hung in hole / Jelling up 2:00

7-23-19 - Mixing more jell going to washover (2570 feet)

Red Rock still caving around them.

7-24-19 - still sighting hole

7-25-19 - " "

7-28-19 - Wirbel to plug hole

7-29-19 - plugged hole.

1). Date: 7-30-19 47-035-03030
2.) Operator's Well Number # 351-A
State County Permit
3.) API Well No.: 47- 035 - 03030

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name William and Denise Duyall
Address 724 Green Road
Kenna, WV 25248
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Joe Taylor
Address 1478 Claylick Road
Riplev, WV
Telephone _____
5) (a) Coal Operator
Name Mountaineer State Energy Inc.
Address _____
(b) Coal Owner(s) with Declaration
Name N/A
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

OR Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas

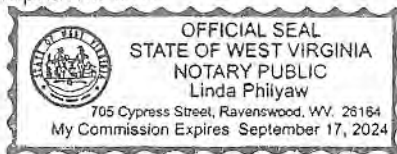
Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through ___ on the above named parties by:

- Personal Service (Affidavit attached)
- Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Well Operator Mountaineer State Energy Inc.
By: _____
Its: GM & VP
Address: P.O. Box 27 Sandyville, WV 25275 RECEIVED
Office of Oil and Gas

Telephone: 304-273-9313
Email: jkent@mountaineerenergy.com AUG 02 2019

Subscribed and sworn before me this 29th day of July, 2019
Linda Philyaw Notary Public WV Department of Environmental Protection
My Commission Expires September 17, 2024

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov



WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

County Jackson
Operator Mountaineer State Energy, Inc.

Operator's Well Number # 351 - A

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

To the coal operator, owner, or lessee named on page WW2-A. You are hereby notified that any objection you wish to make or are required to make by WV Code 22-6-15, 16 or 17, must be filed with the Chief of the Office of Oil and Gas within fifteen (15) days after the receipt of this application by the Office. Mail objections to:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0499 extension 1654

WAIVER

The undersigned coal operator N/A / owner N/A / lessee N/A / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Signature Date

Company Name Mountaineer State Energy, Inc.
By John D. Keat
Its U.P. & Co. Date _____

John D. Keat
Signature Date _____

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WW-2A1
(Rev. 1/11)

Operator's Well Number #351-A

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8(d)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that -

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
APLCO HELMS	MOUNTAINEER STATE ENERGY, INC.	1/8	SEE ATTACHED DECLARATION NOTICE OF UNITIZATION

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- o WV Division of Water and Waste Management
- o WV Division of Natural Resources
- o WV Division of Highways
- o U.S. Army Corps of Engineers
- o U.S. Fish and Wildlife Service
- o County Floodplain Coordinator

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The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator:
By: Its:

Mountaineer State Operations, Inc.

WV Department of Environmental Protection

4703503030

West Virginia Secretary of State — Online Data Services

Business and Licensing

Online Data Services Help

Business Organization Detail

NOTICE: The West Virginia Secretary of State's Office makes every reasonable effort to ensure the accuracy of information. However, we make no representation or warranty as to the correctness or completeness of the information. If information is missing from this page, it is not in the The West Virginia Secretary of State's database.

CARL E. SMITH PETROLEUM, INC.

Organization Information								
Org Type	Effective Date	Established Date	Filing Date	Charter	Class	Sec Type	Termination Date	Termination Reason
C Corporation	4/14/1981		4/14/1981	Domestic	Profit		9/10/2008	Merger

Organization Information			
Business Purpose	2111 - Mining, Quarrying, Oil & Gas Extraction - Oil and Gas Extraction - Crude Oil and Natural Gas Extraction		Capital Stock 1000.0000
Charter County	Jackson	Control Number	0
Charter State	WV	Excess Acres	0
At Will Term		Member Managed	
At Will Term Years		Par Value	1.000000
Authorized Shares	1000	Young Entrepreneur	Not Specified

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Addresses	
Type	Address
Notice of Process Address	JAMES W. LANE, JR. 205 CAPITOL STREET, SUITE 400 CHARLESTON, WV, 25301 USA
Principal Office Address	INTESECTION ROUTES 21 & 53 SANDYVILLE, WV, 25275 USA
Type	Address

Officers	
Type	Name/Address
Incorporator	CARL E. SMITH, INC. P. O. BOX 4 SANDYVILLE, WV, 25275
President	GENE S. BERTCHER INTERSECTION RTS. 21 & 53 SANDYVILLE, WV, 25275 USA
Secretary	OSCAR SMITH INTERSECTION RTS. 21 & 53 SANDYVILLE, WV, 25275 USA
Treasurer	GENE S. BERTCHER INTERSECTION RTS. 21 & 53 SANDYVILLE, WV, 25275 USA
Vice-President	OSCAR SMITH INTERSECTION RTS. 21 & 53 SANDYVILLE, WV, 25275 USA
Type	Name/Address

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Subsidiaries	
Name	Address

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	CARL E SMITH, INC PO BOX 4 SANDYVILLE, WV, 25275 USA	47035030 30
Name	Address	

Date	Amendment
9/10/2008	MERGER: MERGIN WITH AND INTO CARL E. SMITH, INC., A QUALIFIED WV CORPORATION, THE SURVIVOR
Date	Amendment

Annual Reports
Filed For
2009
2008
2007
2006
2005
2004
2003
2001
2000
1999
Date filed

For more information, please contact the Secretary of State's Office at 304-558-8000.

Wednesday, May 15, 2019 — 4:34 PM

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 Online Data Services Help

470 350 3030

Business Organization Detail

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MOUNTAINEER STATE ENERGY, INC.

Organization Information								
Org Type	Effective Date	Established Date	Filing Date	Charter	Class	Sec Type	Termination Date	Termination Reason
C | Corporation	5/26/1954		5/26/1954	Domestic	Profit			

Organization Information			
Business Purpose	2111 - Mining, Quarrying, Oil & Gas Extraction - Oil and Gas Extraction - Crude Oil and Natural Gas Extraction		Capital Stock 100000.0000
Charter County			Control Number 0
Charter State	WV	Excess Acres 0	
At Will Term	Member Managed		
At Will Term Years			Par Value 100.000000
Authorized Shares	1000	Young Entrepreneur	Not Specified

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 WV Department of Environmental Protection

470 35030 30

Addresses	
Type	Address
Mailing Address	1603 LBJ FREEWAY, SUITE 300 DALLAS, TX, 75234 USA
Notice of Process Address	NATIONAL REGISTERED AGENTS, INC. 5400 D BIG TYLER ROAD CHARLESTON, WV, 25313
Principal Office Address	1603 LBJ FREEWAY, SUITE 300 DALLAS, TX, 75234 USA
Type	Address

Officers	
Type	Name/Address
Director	GENE S. BERTCHER 1603 LBJ FREEWAY, SUITE 300 DALLAS, TX, 75234
Incorporator	HARRY E. KENT SANDYVILLE, WV, 25275 USA
Incorporator	GLEN D. SMITH RAVENSWOOD, WV, 26164 USA
President	GENE BERTCHER 1603 LBJ FREEWAY SUITE 300 DALLAS, TX, 75234
Secretary	GENE S BERTCHER 1603 LBJ FREEWAY SUITE 300 DALLAS, TX, 75234
Treasurer	GENE S BERTCHER 1603 LBJ FREEWAY SUITE 300 DALLAS, TX, 75234
Vice-President	JOHN KENT 1755 WITTINGTON PLACE, SUITE 340 DALLAS, TX, 75234

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Environmental Protection

Type Name/Address 4703503030

Name Changes	
Date	Old Name
9/10/2008	CARL E. SMITH, INC.
Date	Old Name

Mergers				
Merger Date	Merged	Merged State	Survived	Survived State
12/26/2001	ACQCO, INC.	WV	CARL E. SMITH, INC.	WV
9/10/2008	CARL E. SMITH PETROLEUM, INC.	WV	CARL E. SMITH, INC.	WV
9/10/2008	CARL E. SMITH REAL ESTATE, INC.	WV	CARL E. SMITH, INC.	WV
Merger Date	Merged	Merged State	Survived	Survived State

Date	Amendment
9/10/2008	MERGER: MERGING CARL E. SMITH PETROLEUM, INC., A QUALIFIED WV CORPORATION WITH AND INTO CARL E. SMITH, INC., A QUALIFIED WV CORPORATION, THE SURVIVOR
9/10/2008	MERGER: MERGING CARL E. SMITH REAL ESTATE, INC., A QUALIFIED WV CORPORATION WITH AND INTO CARL E. SMITH, INC., A QUALIFIED WV CORPORATION, THE SURVIVOR
9/10/2008	NAME CHANGE: FROM CARL E. SMITH, INC.
12/26/2001	MERGER: MERGING ACQCO, INC., A QUALIFIED WV CORPORATION WITH AND INTO CARL E. SMITH, INC., A QUALIFIED WV CORPORATION, THE SURVIVOR
12/12/2001	AMENDMENT FILED CHANGING THE ADDRESS OF THE PRINCIPAL OFFICE.
7/24/1992	ADD - DECREASE IN STOCK FROM 100 SHARES AT A PAR VALUE OF \$100 TO 5,000 SHARES AT A \$1.00 PAR VALUE TOTAL AUTHORIZED CAPITAL STOCK \$5,000.
4/7/1986	DECREASE: TO 10,000 SHARES AT PAR VALUE \$100.00

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3/9/1970	CHANGE OF NAME FROM SMITH COMPANY ROLL 33
12/9/1969	CHANGE OF NAME FROM CARL E. SMITH, INC. ROLL 30
12/1/1969	CHANGE OF NAME FROM C. E. SMITH AND SONS, INC. ROLL 30
7/10/1968	AMENDMENT
5/5/1955	DECREASE; TO \$25,000;
Date	Amendment

Annual Reports	
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1998	WV Department of Environmental Protection
Date filed	

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For more information, please contact the Secretary of State's Office at 304-558-8000.

Wednesday, May 15, 2019 — 4:36 PM

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BOOK 0236 PAGE 158

DECLARATION - NOTICE OF UNITIZATION

Notice is hereby given that CARL E. SMITH PETROLEUM, INC., a West Virginia corporation, has pooled and unitized the gas leasehold estates, in the formations below the top of the Ononadaga Limestone in the following described leases, on the waters of McGraw of Left Fork of Sandy Creek in Grant District, Jackson County, West Virginia to form a drilling unit of 244.5 acres, more or less, for the production of oil or gas below the top of the Ononadaga Limestone from the Oriskany Sandstone formation, to-wit:

CARL E. SMITH PETROLEUM, INC. LEASES

CARL E. SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 26275

LEASE NO. 3649.1: (Net acres in unit - 3.20) That certain lease dated January 18, 1997, granted by PAUL J. J. HARBIN, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 403.

LEASE NO. 3649.2: (Net acres in unit - 3.20) That certain lease dated January 18, 1997, granted by DARRELL HARBIN AND JANE HARBIN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 409.

LEASE NO. 3649.3: (Net acres in unit - 3.20) That certain lease dated January 18, 1997, granted by VIRGINIA JOAN BAKE, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 405.

LEASE NO. 3649.4: (Net acres in unit - 3.20) That certain lease dated January 18, 1997, granted by FRED L. MORNINGSTAR AND JEAN MORNINGSTAR, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 407.

LEASE NO. 3649.5: (Net acres in unit - 16.0) That certain lease dated January 27, 1997, granted by JAMES L. HARBIN AND NORMA JEAN HARBIN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 524.

LEASE NO. 3649.6: (Net acres in unit - 3.20) That certain lease dated January 27, 1997, granted by WILLIAM HARRISON AND RAMONA HARRISON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 470.

LEASE NO. 3649.7: (Net acres in unit - 1.00) That certain lease dated January 29, 1997, granted by TORY HARRIS, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 530.

LEASE NO. 3649.8: (Net acres in unit - 1.00) That certain lease dated February 22, 1997, granted by KEITH HARRIS AND TRACY HARRIS, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 674.

LEASE NO. 3649.9: (Net acres in unit - 48.0) That certain lease dated January 10, 1997, granted by ANNA JANE PICKENS, widow, to CABOT OIL & GAS CORPORATION, covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 357 and thereby assigned to CARL E. SMITH PETROLEUM, INC. dated May 28, 1999 from CABOT OIL & GAS CORPORATION as recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia in Lease Book 235 at Page 284.

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CARL E. SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 26276

LEASE NO. 3649.10: (Net acres in unit - 4.0) That certain lease dated January 16, 1997, granted by BERNADINE O. YOUNG AND AUSTIN V. YOUNG, her husband, to CABOT OIL & GAS CORPORATION covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 493 and thereby assigned to CARL E. SMITH PETROLEUM, INC. dated May 28, 1999 from CABOT OIL & GAS CORPORATION as recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia in Lease Book 235 at Page 284.

LEASE NO. 3649.11: (Net acres in unit - 4.0) That certain lease dated January 16, 1997, granted by VIOLET HULBOY AND HENRY HULBOY, her husband, to CABOT OIL & GAS CORPORATION covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 532 and thereby assigned to CARL E. SMITH PETROLEUM, INC. dated May 28, 1999 from CABOT OIL & GAS CORPORATION as recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia in Lease Book 235 at Page 284.

LEASE NO. 3649.12: (Net acres in unit - 2.0) That certain lease dated January 16, 1997, granted by ROSANNA MADVAY to CABOT OIL & GAS CORPORATION covering an undivided interest in a tract of land containing 96 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 670 and thereby assigned to CARL E. SMITH PETROLEUM, INC. dated May 28, 1999 from CABOT OIL & GAS CORPORATION as recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia in Lease Book 235 at Page 284.

LEASE NO. 3672.1: (Net acres in unit - .8571) That certain lease dated October 18, 1998, granted by OKEY KOONTZ AND RUTH ANN KOONTZ, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 6 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 234, at Page 580.

LEASE NO. 3672.2: (Net acres in unit - .8571) That certain lease dated October 18, 1998, granted by DALE THOMPSON AND JOYCE THOMPSON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 6 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 234, at Page 574.

LEASE NO. 3672.3: (Net acres in unit - .8571) That certain lease dated October 18, 1998, granted by CARL G. THOMPSON AND VICKIE THOMPSON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 6 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 234, at Page 586.

LEASE NO. 3672.4: (Net acres in unit - .8571) That certain lease dated October 18, 1998, granted by EARL W. THOMPSON AND MILDRED THOMPSON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 6 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 234, at Page 576.

LEASE NO. 3672.5: (Net acres in unit - .8571) That certain lease dated February 11, 1999, granted by DONALD L. THOMPSON AND CAROLYN J. THOMPSON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 6 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 235, at Page 107.

LEASE NO. 3672.6: (Net acres in unit - .8571) That certain lease dated November 10, 1998, granted by GRACE T. BROWDER AND BRUCE BROWDER, her husband, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 6 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 234, at Page 592.

LEASE NO. 3672.7: (Net acres in unit - .8571) That certain lease dated November 21, 1998, granted by WAYNE T. THOMPSON AND JOANNE THOMPSON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 6 acres, more or less, and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 235, at Page 003.

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LEASE NO. 3655.1: (Net acres in unit - 2.4167) That certain lease dated January 16, 1997, granted by JOHN GLOVER AND CAROLYN GLOVER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 411.

LEASE NO. 3655.2: (Net acres in unit - 1.2083) That certain lease dated January 21, 1997, granted by DOW WOLFE SR AND ELOISE WOLFE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 427.

LEASE NO. 3655.3: (Net acres in unit - .9063) That certain lease dated January 18, 1997, granted by JACK WESTFALL AND ILA G. WESTFALL, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 421.

LEASE NO. 3655.4: (Net acres in unit - 1.2063) That certain lease dated January 22, 1997, granted by LAWRENCE E. STUCKEY AND ELEA STUCKEY, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 438.

LEASE NO. 3655.5: (Net acres in unit - .8056) That certain lease dated January 24, 1997, granted by MILDRED NULL, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 436.

LEASE NO. 3655.6: (Net acres in unit - .9063) That certain lease dated January 23, 1997, granted by CURTIS ROBBINS AND BETTY ROBBINS, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 434.

LEASE NO. 3655.7: (Net acres in unit - 1.8125) That certain lease dated January 22, 1997, granted by JACK WILLIAMSON AND THELMA WILLIAMSON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 430.

LEASE NO. 3655.8: (Net acres in unit - 1.8125) That certain lease dated January 22, 1997, granted by GLENN GILKINSON AND KATHERINE GILKINSON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 432.

LEASE NO. 3655.9: (Net acres in unit - .4028) That certain lease dated January 23, 1997, granted by ALMA RANDOLPH, widow, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 419.

LEASE NO. 3655.10: (Net acres in unit - 1.2083) That certain lease dated January 22, 1997, granted by GERALD MURRAY, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 440.

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CARL E. SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 26275

LEASE NO. 3655.11: (Net acres in unit - .4028) That certain lease dated January 27, 1997, granted by RAY THORNTON AND CAROLYN THORNTON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 448.

LEASE NO. 3655.12: (Net acres in unit - .9063) That certain lease dated January 18, 1997, granted by MARION R. WELCH AND LOU WELCH, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 518.

LEASE NO. 3655.13: (Net acres in unit - .4028) That certain lease dated January 28, 1997, granted by CARL THORNTON AND TWILA THORNTON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 466.

LEASE NO. 3655.14: (Net acres in unit - .4028) That certain lease dated January 31, 1997, granted by GLENNIE SAMS, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 472.

LEASE NO. 3655.15: (Net acres in unit - .9063) That certain lease dated January 27, 1997, granted by OMA G. COX, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 468.

LEASE NO. 3655.16: (Net acres in unit - 1.2083) That certain lease dated December 2, 1996, granted by EDGAR BAUCH AND ETHEL BAUCH, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 474.

LEASE NO. 3655.17: (Net acres in unit - 1.2083) That certain lease dated February 1, 1997, granted by WAYNE KURLINSKI AND VIRGINIA KURLINSKI, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 528.

LEASE NO. 3655.18: (Net acres in unit - .3021) That certain lease dated February 6, 1997, granted by JACK LYONS AND GLADYS LYONS, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 540.

LEASE NO. 3655.19: (Net acres in unit - .4028) That certain lease dated February 4, 1997, granted by AMBER CRUM AND ADA CRUM, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 538.

LEASE NO. 3655.20: (Net acres in unit - 1.8125) That certain lease dated February 4, 1997, granted by THEODORE CHOUINARD AND MARGARET CHOUINARD, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 542.

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LEASE NO. 3655.21: (Net acres in unit - 10.8750) That certain lease dated February 10, 1997 granted by FRED ARGENIO AND HELEN ARGENIO, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 576.

LEASE NO. 3655.22: (Net acres in unit - .3021) That certain lease dated February 12, 1997, granted by JUANITA SMITH, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 623.

LEASE NO. 3655.23: (Net acres in unit - 1.2083) That certain lease dated February 19, 1997, granted by THOMAS CALGOS AND MARY CALGOS, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 660.

LEASE NO. 3655.24: (Net acres in unit - 1.6111) That certain lease dated February 18, 1997, granted by ROSA McCONNELL, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 658.

LEASE NO. 3655.25: (Net acres in unit - .3021) That certain lease dated February 19, 1997, granted by DONALD WAYNE MOORE AND MARY MOORE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 656.

LEASE NO. 3655.26: (Net acres in unit - .3021) That certain lease dated February 19, 1997, granted by WILLIAM MOORE AND JOAN MOORE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 702.

LEASE NO. 3655.27: (Net acres in unit - .3021) That certain lease dated February 27, 1997, granted by CHARLES MOORE AND ELIZABETH MOORE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 735.

LEASE NO. 3655.28: (Net acres in unit - 1.8125) That certain lease dated March 4, 1997, granted by GLEN D. ARCHER AND SHARON ARCHER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 757.

LEASE NO. 3655.29: (Net acres in unit - 1.8125) That certain lease dated March 5, 1997, granted by PAUL COOLEY AND GLORENE COOLEY, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 758.

LEASE NO. 3655.30: (Net acres in unit - .3021) That certain lease dated March 8, 1997, granted by CARL MOORE AND JOSEPHINE MOORE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 781.

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CARL E. SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 25275

LEASE NO. 3655.31: (Net acres in unit - 1.8125) That certain lease dated March 7, 1997, granted by CHARLES EDDY AND RUTH EDDY, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 038.

LEASE NO. 3655.32: (Net acres in unit - 1.8125) That certain lease dated March 12, 1997, granted by ROBERT SWARTZ AND RUTH SWARTZ, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 044.

LEASE NO. 3655.33: (Net acres in unit - 3.6250) That certain lease dated March 7, 1997, granted by WILLIAM FARLEY AND GLADYS FARLEY, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 042.

LEASE NO. 3655.34: (Net acres in unit - 1.2083) That certain lease dated February 24, 1998, granted by MICHAEL J. SMEDLEY AND SANDRA L. SMEDLEY to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 701.

LEASE NO. 3655.35: (Net acres in unit - 2.4167) That certain lease dated February 24, 1998, granted by DONNA LOTT - single MICHAEL J. SMEDLEY Power of Attorney, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 703.

LEASE NO. 3655.36: (Net acres in unit - 1.2083) That certain lease dated February 24, 1998, granted by RHENA STANLEY, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 705.

LEASE NO. 3655.37: (Net acres in unit - .4028) That certain lease dated March 6, 1998, granted by GLADYS THORTON - widow CRYSTAL JONES Power of Attorney, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 711.

LEASE NO. 3655.38: (Net acres in unit - 1.8125) That certain lease dated September 14, 1999, granted by CHARLES ARCHER AND JEANETTE ARCHER to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 235, at Page 485.

LEASE NO. 3655.39: (Net acres in unit - .1007) That certain lease dated September 15, 1999, granted by JUDI BOYLE to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 235, at Page 487.

LEASE NO. 3655.40: (Net acres in unit - .1007) That certain lease dated September 24, 1999, granted by JAMES C. BASTON to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 235, at Page 513.

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LEASE NO. 3655.41: (Net acres in unit - .1007) That certain lease dated November 6, 1999, granted by DENNIS P. BASTON AND DIANE B. BASTON to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 116 acres, more or less, (but using for the purpose of this unitization only 58 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, WV, in Lease Book 236, at Page 033.

LEASE NO. 3656.1: (Net acres in unit - 1.3203) That certain lease dated January 22, 1997, granted by WILLIAM W. WAYBRIGHT, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 423.

LEASE NO. 3656.2: (Net acres in unit - .7545) That certain lease dated January 28, 1997, granted by MARVIN W. CULPEPPER AND CARMEN E. CULPEPPER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 520.

LEASE NO. 3656.3: (Net acres in unit - .0782) That certain lease dated January 28, 1997, granted by TED B. LAW AND JANICE LAW, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, WV, in Lease Book 230, at Page 522.

LEASE NO. 3656.4: (Net acres in unit - 10.5625) That certain lease dated January 28, 1997, granted by WILMA JEAN KELCH, divorced, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 464.

LEASE NO. 3656.5: (Net acres in unit - .1408) That certain lease dated February 3, 1997, granted by DORTHA ANGUS, widow, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 516.

LEASE NO. 3656.6: (Net acres in unit - .176) That certain lease dated January 30, 1997, granted by OTHO TOLLEY, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 514.

LEASE NO. 3656.7: (Net acres in unit - .4311) That certain lease dated January 30, 1997, granted by WARREN P. HUDSON AND JUNE E. HUDSON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, WV, in Lease Book 230, at Page 476.

LEASE NO. 3656.8: (Net acres in unit - .4311) That certain lease dated February 5, 1997, granted by MATTHEW AMATO, widower, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 526.

LEASE NO. 3656.9: (Net acres in unit - .7042) That certain lease dated February 6, 1997, granted by TRESSIE SKEEN, widow, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 536.

LEASE NO. 3656.10: (Net acres in unit - .3912) That certain lease dated February 7, 1997, granted by HELEN MALESKI, widow, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 534.

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LEASE NO. 3656.11: (Net acres in unit - .2641) That certain lease dated February 11, 1997, granted by RONALD CONNERS, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 546.

LEASE NO. 3656.12: (Net acres in unit - .0391) That certain lease dated February 9, 1997, granted by WILLIAM H. RICKARD AND DOTTY LOU RICKARD, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 544.

LEASE NO. 3656.13: (Net acres in unit - .503) That certain lease dated February 10, 1997, granted by JAMES A. EAKINS, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 548.

LEASE NO. 3656.14: (Net acres in unit - .503) That certain lease dated February 9, 1997, granted by DAYTON COPEEN AND GLENDINE COPEEN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, WV, in Lease Book 230, at Page 549.

LEASE NO. 3656.15: (Net acres in unit - .1408) That certain lease dated February 8, 1997, granted by BILL WILLIAMS AND JOYCE WILLIAMS, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, WV, in Lease Book 230, at Page 555.

LEASE NO. 3656.16: (Net acres in unit - .1304) That certain lease dated February 11, 1997, granted by JOHN TRIPLETT AND DOROTHY TRIPLETT, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, WV, in Lease Book 230, at Page 557.

LEASE NO. 3656.17: (Net acres in unit - .1956) That certain lease dated February 12, 1997, granted by CURTIS J. FOUSE AND VELMA IRENE FOUSE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 551.

LEASE NO. 3656.18: (Net acres in unit - .3018) That certain lease dated February 11, 1997, granted by ROY J. BAKER AND EUNICE BAKER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, WV, in Lease Book 230, at Page 553.

LEASE NO. 3656.19: (Net acres in unit - .4311) That certain lease dated February 10, 1997, granted by BRUCE HUDSON AND LUCILLE HUDSON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, WV, in Lease Book 230, at Page 574.

LEASE NO. 3656.20: (Net acres in unit - .1304) That certain lease dated February 10, 1997, granted by CAROLYN MITCHELL, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 580.

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LEASE NO. 3656.21: (Net acres in unit - .0391) That certain lease dated February 14, 1997, granted by DAVID A. GAINER AND CAROL S. GAINER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 578.

LEASE NO. 3656.22: (Net acres in unit - .5030) That certain lease dated February 7, 1997, granted by JERRY MANGUS AND PEGGY MANGUS, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 582.

LEASE NO. 3656.23: (Net acres in unit - .5030) That certain lease dated February 18, 1997, granted by MAYFORD EAKINS AND DOROTHY EAKINS, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 625.

LEASE NO. 3656.24: (Net acres in unit - .0719) That certain lease dated February 17, 1997, granted by DONALD CONLEY AND SOTERA CONLEY, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 664.

LEASE NO. 3656.25: (Net acres in unit - .2641) That certain lease dated February 14, 1997, granted by ROY CONNER AND MARJORIE CONNER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 662.

LEASE NO. 3656.26: (Net acres in unit - .4311) That certain lease dated February 19, 1997, granted by WILBERT L. STUTLER AND SHIRLEY A. STUTLER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 654.

LEASE NO. 3656.27: (Net acres in unit - .0782) That certain lease dated February 21, 1997, granted by BASIL LAWRENTZ AND SARA LAWRENTZ, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 668.

LEASE NO. 3656.28: (Net acres in unit - .4311) That certain lease dated February 14, 1997, granted by FLOSSIE EAKIN, widow, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 670.

LEASE NO. 3656.29: (Net acres in unit - .1956) That certain lease dated February 19, 1997, granted by ROY MARTIN AND HELEN MARTIN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson Co., West Virginia, in Lease Book 230, at Page 672.

LEASE NO. 3656.30: (Net acres in unit - .1408) That certain lease dated February 21, 1997, granted by WILLIAM O. TOLLEY AND MARGARET TOLLEY, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 666.

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LEASE NO. 3656.31: (Net acres in unit - .7042) That certain lease dated February 21, 1997, granted by EVELYN LAMIELL, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 700.

LEASE NO. 3656.32: (Net acres in unit - .4694) That certain lease dated February 24, 1997, granted by WENDELL CORNETET JR. AND JUNE LESTER CORNETET, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 704.

LEASE NO. 3656.33: (Net acres in unit - 1.7604) That certain lease dated February 24, 1997, granted by NORMA L. DESMOND, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 708.

LEASE NO. 3656.34: (Net acres in unit - .3912) That certain lease dated February 26, 1997, granted by SARAH BAKER, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 706.

LEASE NO. 3656.35: (Net acres in unit - 1.5648) That certain lease dated February 25, 1997, granted by DICK VALLEE AND HAZEL VALLEE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 734.

LEASE NO. 3656.36: (Net acres in unit - .6036) That certain lease dated February 27, 1997, granted by JERRY BRABHAM AND CAROLYN BRABHAM, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 724.

LEASE NO. 3656.37: (Net acres in unit - .8802) That certain lease dated February 26, 1997, granted by BILL MEEK AND ELEANOR MEEK, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 722.

LEASE NO. 3656.38: (Net acres in unit - .4694) That certain lease dated February 27, 1997, granted by E. ROY LESTER, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 720.

LEASE NO. 3656.39: (Net acres in unit - .8802) That certain lease dated February 28, 1997, granted by GLENN ROMINE AND CAROL ROMINE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 718.

LEASE NO. 3656.40: (Net acres in unit - .2641) That certain lease dated February 25, 1997, granted by DONALD CONNER AND DOROTHY CONNER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 726.

LEASE NO. 3656.41: (Net acres in unit - .3018) That certain lease dated February 27, 1997, granted by ROY H. BRABHAM, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 728.

LEASE NO. 3656.42: (Net acres in unit - .0719) That certain lease dated March 2, 1997, granted by GEORGE KING AND MARJORIE KING, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 741.

LEASE NO. 3656.43: (Net acres in unit - .4694) That certain lease dated March 4, 1997, granted by CHARLES LESTER AND CLARICE LESTER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 739.

LEASE NO. 3656.44: (Net acres in unit - .0391) That certain lease dated March 4, 1997, granted by KERMIT DAVID ELLISON AND FRED A JEANNE ELLISON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 737.

LEASE NO. 3656.45: (Net acres in unit - .3521) That certain lease dated March 7, 1997, granted by MARIE MILLER to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 755.

LEASE NO. 3656.46: (Net acres in unit - .7042) That certain lease dated March 1, 1997, granted by RICHARD MARTIN AND ELLEN MARTIN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 753.

LEASE NO. 3656.47: (Net acres in unit - .1408) That certain lease dated March 3, 1997, granted by JOHN F. TOLLEY AND BETTY TOLLEY, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 751.

LEASE NO. 3656.48: (Net acres in unit - .7042) That certain lease dated March 3, 1997, granted by ROBERT ARCHER AND SHIRLEY ARCHER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 34.

LEASE NO. 3656.49: (Net acres in unit - 1.2071) That certain lease dated March 10, 1997, granted by RUBY CASTO, widow, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 783.

LEASE NO. 3656.50: (Net acres in unit - .0391) That certain lease dated March 11, 1997, granted by BILLY R. ELMORE AND DIXIE ELMORE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 36.

CARL E. SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 26275

LEASE NO. 3656.51: (Net acres in unit - .4311) That certain lease dated March 5, 1997, granted by JUANITA HUDSON, widow, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 32.

LEASE NO. 3656.52: (Net acres in unit - .1956) That certain lease dated March 12, 1997, granted by LOU HALL AND MAXINE HALL, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 30.

LEASE NO. 3656.53: (Net acres in unit - .2156) That certain lease dated February 21, 1997, granted by DAVID L. TRUMAN AND JANET TRUMAN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 50.

LEASE NO. 3656.54: (Net acres in unit - .0719) That certain lease dated March 17, 1997, granted by NORMAN HARRIS AND LOIS HARRIS to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 153.

LEASE NO. 3656.55: (Net acres in unit - .8802) That certain lease dated February 18, 1997, granted by ARTHUR ROMINE AND RUTH ROMINE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 155.

LEASE NO. 3656.56: (Net acres in unit - .6602) That certain lease dated April 9, 1997, granted by JAMES K. WAYBRIGHT AND HELEN WAYBRIGHT, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 193.

LEASE NO. 3656.57: (Net acres in unit - .0719) That certain lease dated April 12, 1997, granted by WILLIAM VANGORDER AND VELMA VANGORDER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 225.

LEASE NO. 3656.58: (Net acres in unit - .1760) That certain lease dated April 17, 1997, granted by GARY TOLLEY AND DIXIE WASHINGTON, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 223.

LEASE NO. 3656.59: (Net acres in unit - .0604) That certain lease dated May 6, 1997, granted by IRA HENRY to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 296.

LEASE NO. 3656.60: (Net acres in unit - .0762) That certain lease dated May 5, 1997, granted by JAMES DROST AND KATHERINE ESTELLE DROST, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 300.

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CARL E. SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 26275

LEASE NO. 3656.61: (Net acres in unit - .0559) That certain lease dated May 8, 1997, granted by TOM AND JENNIFER PHILLIPS, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 298.

LEASE NO. 3656.62: (Net acres in unit - .0261) That certain lease dated May 12, 1997, granted by LESTER AND BETTY MILLER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 288.

LEASE NO. 3656.63: (Net acres in unit - .1304) That certain lease dated February 22, 1997, granted by HERBERT FANNIN AND DELPHA FANNIN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 258.

LEASE NO. 3656.64: (Net acres in unit - .0604) That certain lease dated May 8, 1997, granted by LELIA DODSON, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 302.

LEASE NO. 3656.65: (Net acres in unit - .0504) That certain lease dated May 9, 1997, granted by JIM AND MARTHA HENRY, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 320.

LEASE NO. 3656.66: (Net acres in unit - .0559) That certain lease dated May 7, 1997, granted by KIMBERLY KUTSCHER, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 339.

LEASE NO. 3656.67: (Net acres in unit - .0719) That certain lease dated May 7, 1997, granted by LORENZO O. BRIGHTBILL III AND RUTH A. BRIGHTBILL, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 341.

LEASE NO. 3656.68: (Net acres in unit - .0559) That certain lease dated May 14, 1997, granted by ANDREW AND DAYNA OLEI, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 335.

LEASE NO. 3656.69: (Net acres in unit - .0604) That certain lease dated May 14, 1997, granted by SADIE HENSLEY to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 333.

LEASE NO. 3656.70: (Net acres in unit - .0559) That certain lease dated May 21, 1997, granted by TONEY EAKIN, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 371.

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LEASE NO. 3656.71: (Net acres in unit - .0604) That certain lease dated May 22, 1997, granted by BELVA FAIN to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 373.

LEASE NO. 3656.72: (Net acres in unit - .1408) That certain lease dated June 2, 1997, granted by CARL R. AND MARY FRANCES SNYDER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 378.

LEASE NO. 3656.73: (Net acres in unit - .0604) That certain lease dated June 4, 1997, granted by JO HENRY, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 386.

LEASE NO. 3656.74: (Net acres in unit - .0604) That certain lease dated May 31, 1997, granted by FRANK AND BETTY HENRY, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 382.

LEASE NO. 3656.76: (Net acres in unit - .2327) That certain lease dated July 23, 1997, granted by BOB HENDERSON, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 565.

LEASE NO. 3656.77: (Net acres in unit - .0604) That certain lease dated July 21, 1997, granted by FRANK AND ANN SHANBLIN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 563.

LEASE NO. 3656.78: (Net acres in unit - .1956) That certain lease dated July 22, 1997, granted by ERNEST F. ARCHER AND ELIZABETH ARCHER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 561.

LEASE NO. 3656.79: (Net acres in unit - .0587) That certain lease dated July 24, 1997, granted by JUDITH CAMPBELL, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 572.

LEASE NO. 3656.80: (Net acres in unit - .8802) That certain lease dated July 23, 1997, granted by GARLAND ROMINE, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 569.

LEASE NO. 3656.81: (Net acres in unit - .1760) That certain lease dated July 21, 1997, granted by THOMAS KISH AND LENORA KISH, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 584.

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CARLE SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 26275

LEASE NO. 3656.82: (Net acres in unit - .6036) That certain lease dated July 23, 1997, granted by IRENE PARSONS, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 580.

LEASE NO. 3656.83: (Net acres in unit - .2156) That certain lease dated July 25, 1997, granted by STEVE AND YVETTE TRUMAN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 582.

LEASE NO. 3656.84: (Net acres in unit - 1.3203) That certain lease dated July 30, 1997, granted by MILLIE M. WAYBRIGHT, divorced, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 586.

LEASE NO. 3656.85: (Net acres in unit - .0587) That certain lease dated July 28, 1997, granted by DANNY MARTIN AND SANDRA MARTIN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 588.

LEASE NO. 3656.86: (Net acres in unit - .6602) That certain lease dated February 24, 1997, granted by BOBBY V. LANHAM AND CANDACE LOUISE LANHAM, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 559.

LEASE NO. 3656.87: (Net acres in unit - .0587) That certain lease dated July 31, 1997, granted by THOMAS AND ELIZABETH MARTIN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 594.

LEASE NO. 3656.88: (Net acres in unit - .0196) That certain lease dated July 31, 1997, granted by BARBARA O'GUINN, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 596.

LEASE NO. 3656.89: (Net acres in unit - .7042) That certain lease dated August 6, 1997, granted by EDGAR B. TIMMS, JR. AND MARY RUTH TIMMS, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 619.

LEASE NO. 3656.90: (Net acres in unit - .0587) That certain lease dated August 4, 1997, granted by JUANITA SAYRE AND RAY SAYRE, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 231, at Page 617.

LEASE NO. 3656.91: (Net acres in unit - .0587) That certain lease dated September 26, 1997, granted by EDWARD M. MARTIN AND MARION J. MARTIN, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 35.

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CARL E. SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 26275

LEASE NO. 3656.92: (Net acres in unit - .2201) That certain lease dated September 15, 1997, granted by CHRISTOPHER AND LISA L. ZANISH, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 23.

LEASE NO. 3656.93: (Net acres in unit - .0196) That certain lease dated September 24, 1997, granted by JOYCE DORSEY AND D. L. DORSEY to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 37.

LEASE NO. 3656.94: (Net acres in unit - .7545) That certain lease dated October 16, 1997, granted by MAXINE HARPER O'DELL to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 80.

LEASE NO. 3656.95: (Net acres in unit - .2347) That certain lease dated October 27, 1997, granted by ROMIE REX FRYE, WIDOWER, TRUSTEE FOR THE ESTATE OF DOROTHY WILLIAMS to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 116.

LEASE NO. 3656.96: (Net acres in unit - .1760) That certain lease dated October 13, 1997, granted by MELVIN R. TOLLEY AND WANDA TOLLEY, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 373.

LEASE NO. 3656.97: (Net acres in unit - .0144) That certain lease dated November 14, 1997, granted by CAROL YOHO AND BARRY LEE YOHO to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 181.

LEASE NO. 3656.98: (Net acres in unit - .044) That certain lease dated December 1, 1997, granted by JEFF CONNER, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 343.

LEASE NO. 3656.99: (Net acres in unit - .0144) That certain lease dated December 1, 1997, granted by ROBERT EAKINS to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 341.

LEASE NO. 3656.100: (Net acres in unit - .0440) That certain lease dated December 3, 1997, granted by DALE CONNER, single, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 262.

LEASE NO. 3656.101: (Net acres in unit - .0440) That certain lease dated December 3, 1997, granted by BOBBY CONNER AND MABEL CONNER, husband and wife, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 264.

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LEASE NO. 3656.102: (Net acres in unit - .0144) That certain lease dated December 18, 1997, granted by SHIRLEY DAVIS AND FRANKLIN DAVIS, spouse, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 415.

LEASE NO. 3656.103: (Net acres in unit - 1.3203) That certain lease dated December 19, 1997, granted by RUEY HYRE to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 411.

LEASE NO. 3656.104: (Net acres in unit - .7042) That certain lease dated January 28, 1998, granted by SYBIL ARCHER to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 491.

LEASE NO. 3656.105: (Net acres in unit - .3018) That certain lease dated January 9, 1998, granted by FRANK T. LITTON, JR. AND DORIS MILLS LITTON, CO-TRUSTEES OF THE FRANK T. LITTON RESTATED REVOCABLE TRUST to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 417.

LEASE NO. 3656.106: (Net acres in unit - .4694) That certain lease dated March 16, 1998, granted by CARNEGIE NATURAL GAS COMPANY to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 737.

LEASE NO. 3656.107: (Net acres in unit - .0880) That certain lease dated March 21, 1998, granted by CAROL CONNER to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 233, at Page 58.

LEASE NO. 3656.108: (Net acres in unit - .3018) That certain lease dated April 8, 1998, granted by CHARLES EDWARD BEULIKE, HEIR AND BENEFICIARY OF MYRTLE BEULIKE, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 233, at Page 145.

LEASE NO. 3656.109: (Net acres in unit - .3018) That certain lease dated January 9, 1998, granted by EDNA MARIE ERWIN to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 232, at Page 419.

LEASE NO. 3656.110: (Net acres in unit - 1.2071) That certain lease dated March 31, 1998, granted by WACO OIL & GAS CO., INC. and TRIO PETROLEUM CORP. to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 233, at Page 227.

LEASE NO. 3656.111: (Net acres in unit - 10.5625) That certain lease dated March 31, 1998, granted by WACO OIL & GAS CO., INC. and TRIO PETROLEUM CORP. to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 233, at Page 225.

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LEASE NO. 3656.112: (Net acres in unit - .3018) That certain lease dated June 15, 1998, granted by CLYDE LITTON to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 233, at Page 306.

LEASE NO. 3656.113: (Net acres in unit - 15.0324) That certain lease dated July 16, 1998, granted by LARRY L. SKEEN, SPECIAL COMMISSIONER, PURSUANT TO COURT ORDER IN JACKSON COUNTY CIVIL ACTION NO. 97-C-102 (CARL E. SMITH PETROLEUM, INC. V. ROSALIND RAMEY JONES, ET.AL.) WHICH ORDER WAS ENTERED JULY 10, 1998 to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 234, at Page 74.

LEASE NO. 3656.114: (Net acres in unit - 5.2813) That certain lease dated January 14, 1997, granted by SHEILA C. MCCOY A.I.F. to CABOT OIL AND GAS CORPORATION covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 365 assigned to CARL E. SMITH PETROLEUM, INC. in Lease Book 232, at Page 713.

LEASE NO. 3656.115: (Net acres in unit - 5.2813) That certain lease dated January 15, 1997, granted by FREDA OPAL LLOYD, widow, to CABOT OIL AND GAS CORPORATION covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 230, at Page 460 assigned to CARL E. SMITH PETROLEUM, INC. in Lease Book 232, at Page 713.

LEASE NO. 3656.116: (Net acres in unit - .3018) That certain lease dated February 4, 1999, granted by BANK ONE OF WEST VIRGINIA, N.A., TRUSTEE OF ARTHUR C. LITTON TRUST, to CARL E. SMITH PETROLEUM, INC. covering an undivided interest in a tract of land containing 1880 acres, more or less, (but using for the purpose of this unitization only 84.5 acres) and recorded in the Office of the Clerk of the County Court of Jackson County, West Virginia, in Lease Book 235, at Page 282.

To the aforesaid leases, agreements and records reference is hereby made for all purposes.

Said nonnetties are shown and identified on the map or map attached

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Lease No. 3655. 1	.98843%
Lease No. 3655. 2	.49419%
Lease No. 3655. 3	.37067%
Lease No. 3655. 4	.49419%
Lease No. 3655. 5	.32949%
Lease No. 3655. 6	.37067%
Lease No. 3655. 7	.74131%
Lease No. 3655. 8	.74131%
Lease No. 3655. 9	.16474%
Lease No. 3655. 10	.49419%
Lease No. 3655. 11	.16474%
Lease No. 3655. 12	.37067%
Lease No. 3655. 13	.16474%
Lease No. 3655. 14	.16474%
Lease No. 3655. 15	.37067%
Lease No. 3655. 16	.49419%
Lease No. 3655. 17	.49419%
Lease No. 3655. 18	.12356%
Lease No. 3655. 19	.16474%
Lease No. 3655. 20	.74131%
Lease No. 3655. 21	4.44785%
Lease No. 3655. 22	.12356%
Lease No. 3655. 23	.49419%
Lease No. 3655. 24	.65894%
Lease No. 3655. 25	.12356%
Lease No. 3655. 26	.12356%
Lease No. 3655. 27	.12356%
Lease No. 3655. 28	.74131%
Lease No. 3655. 29	.12356%
Lease No. 3655. 30	.74131%
Lease No. 3655. 31	.74131%
Lease No. 3655. 32	.74131%
Lease No. 3655. 33	1.48262%
Lease No. 3655. 34	.49419%
Lease No. 3655. 35	.98843%
Lease No. 3655. 36	.49419%
Lease No. 3655. 37	.16474%
Lease No. 3655. 38	.74131%
Lease No. 3655. 39	.04119%
Lease No. 3655. 40	.04119%
Lease No. 3655. 41	.04119%
Lease No. 3656. 1	.54000%
Lease No. 3656. 2	.30859%
Lease No. 3656. 3	.03198%
Lease No. 3656. 4	4.32004%

CARL E. SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 25275

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Office of Oil and Gas

AUG 02 2019

WV Department of
Environmental Protection

CARL E. SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 26275

Lease No. 3656.34	.16%
Lease No. 3656.35	.64%
Lease No. 3656.36	.24687%
Lease No. 3656.37	.36%
Lease No. 3656.38	.19198%
Lease No. 3656.39	.36%
Lease No. 3656.40	.10802%
Lease No. 3656.41	.12344%
Lease No. 3656.42	.02941%
Lease No. 3656.43	.19198%
Lease No. 3656.44	.01599%
Lease No. 3656.45	.14401%
Lease No. 3656.46	.28802%
Lease No. 3656.47	.05759%
Lease No. 3656.48	.28802%
Lease No. 3656.49	.49370%
Lease No. 3656.50	.01599%
Lease No. 3656.51	.17632%
Lease No. 3656.52	.08%
Lease No. 3656.53	.08818%
Lease No. 3656.54	.02941%
Lease No. 3656.55	.36%
Lease No. 3656.56	.27002%
Lease No. 3656.57	.02941%
Lease No. 3656.58	.07198%
Lease No. 3656.59	.02470%
Lease No. 3656.60	.03198%
Lease No. 3656.61	.02286%
Lease No. 3656.62	.01067%
Lease No. 3656.63	.05333%
Lease No. 3656.64	.0247%
Lease No. 3656.65	.0247%
Lease No. 3656.66	.02286%
Lease No. 3656.67	.02941%
Lease No. 3656.68	.02286%
Lease No. 3656.69	.0247%
Lease No. 3656.70	.02286%
Lease No. 3656.71	.0247%
Lease No. 3656.72	.05759%
Lease No. 3656.73	.0247%
Lease No. 3656.74	.0247%
Lease No. 3656.76	.09599%
Lease No. 3656.77	.0247%
Lease No. 3656.78	.08%
Lease No. 3656.79	.02401%
Lease No. 3656.80	.36%
Lease No. 3656.81	.07198%
Lease No. 3656.82	.24687%
Lease No. 3656.83	.08818%
Lease No. 3656.84	.54%
Lease No. 3656.85	.02401%
Lease No. 3656.86	.27002%
Lease No. 3656.87	.02401%
Lease No. 3656.88	.00802%
Lease No. 3656.89	.28802%
Lease No. 3656.90	.02401%
Lease No. 3656.91	.02401%
Lease No. 3656.92	.09002%
Lease No. 3656.93	.00802%
Lease No. 3656.94	.30859%
Lease No. 3656.95	.09599%
Lease No. 3656.96	.07198%
Lease No. 3656.97	.00589%
Lease No. 3656.98	.018%
Lease No. 3656.99	.00589%
Lease No. 3656.100	.018%
Lease No. 3656.101	.018%
Lease No. 3656.102	.00589%
Lease No. 3656.103	.54%
Lease No. 3656.104	.28802%
Lease No. 3656.105	.12344%
Lease No. 3656.106	.19198%
Lease No. 3656.107	.03599%
Lease No. 3656.108	.12344%

RECEIVED Office of Oil and Gas

AUG 02 2019

CARL E. SMITH PETROLEUM, INC. P.O. BOX 4, SANDYVILLE, WEST VIRGINIA 25275

Lease No. 3656.109	. . . . .	.12344%
Lease No. 3656.110	. . . . .	.4937%
Lease No. 3656.111	. . . . .	4.32004%
Lease No. 3656.112	. . . . .	.12344%
Lease No. 3656.113	. . . . .	6.14821%
Lease No. 3656.114	. . . . .	2.16004%
Lease No. 3656.115	. . . . .	2.16004%
Lease No. 3656.116	. . . . .	.12344%
Escrow		3.24215%

TOTAL 100.00%

This declaration notice forming this drilling unit is made by authority of the aforesaid amendatory agreements to said leases or the pooling provisions contained in the aforesaid leases.

In WITNESS WHEREOF, the said Carl E. Smith Petroleum, Inc., a corporation, has caused its corporate name to be hereunto subscribed and its corporate seal hereunto affixed by its President duly authorized as of this 20th day of January, 2000.

Witness:

Ezekiel A. P.

Linda D. Phyllis

CARL E. SMITH PETROLEUM, INC.
a corporation

BY: Larry D. Smith
Larry D. Smith, President

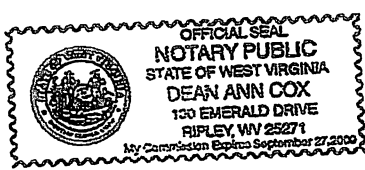
STATE OF WEST VIRGINIA,
COUNTY OF JACKSON, To-wit:

I, Dean Ann Cox, a Notary Public in said county and state, hereby certify that LARRY D. SMITH, PRESIDENT, who signed above bearing date the 20th day of January, 2000, for CARL E. SMITH PETROLEUM, INC., a corporation, has this day in said county before me acknowledged the said writing to be the act and deed of said corporation.

Given under my hand and seal this 20th day of January, 2000.

Dean Ann Cox
Notary Public

My Commission Expires: September 27, 2009.



This instrument was prepared by Robert A. Pryce, P. O. Box 27, Sandyville, WV 25275-0027.

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Office of Oil and Gas
AUG 02 2019
WV Department of
Environmental Protection

WW-2B1
(5-12)

Well No. 351 - A

West Virginia Department of Environmental Protection
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contractor chosen to collect sample.

Certified Laboratory Name Fairway Labs
Sampling Contractor SLS Land & Energy Development

Well Operator Mountaineer Energy Inc.
Address P.O. Box 27
Sandyville, WV 25257
Telephone 304-273-9313

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

SEE ATTACHED

RECEIVED
Office of Oil and Gas
AUG 02 2019
WV Department of
Environmental Protection

24-9

*Timmy E. & Patricia I. Boyce ✓

1174 Maul Camp Run Rd.

Ravenswood, WV 26164

24-10.1

Timothy E. & Charles W. Boyce ✓

9706 Pond Creek Rd.

Rockport, WV 26169

24-11, 28

*Christopher Wight 304-377-8333 (New Owner)

1843 Ranch Road

Sandyville, WV 25275

Russell L. & Tamara Schreiber Trustees (Previous Owner) ✓

515 Front St.

Marietta, OH 45750

24-11.1

*Dennise R. & William L. Duvall ✓

724 Green Rd.

South Charleston, WV 25309

24-11.2, 44

James C. Trivett & Sallie A. Guffanti ✓

2880 McGraw Run Rd.

Sandyville, WV 25275

24-40

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Office of Oil and Gas
AUG 02 2019
WV Department of
Environmental Protection

Edwin & Sarah Hildebrand ✓
P.O. Box 1036
Parkersburg, WV 26102

24-42.3

Teresa L. & David L. Kessel ✓ 304-373-3021
107 Sugar Maple Ln.
Sandyville, WV 25275

24-42.4

Sherry L. & Michael D. Stevens ✓
2864 McGraw Run Rd.
Sandyville, WV 25275

24-44.1

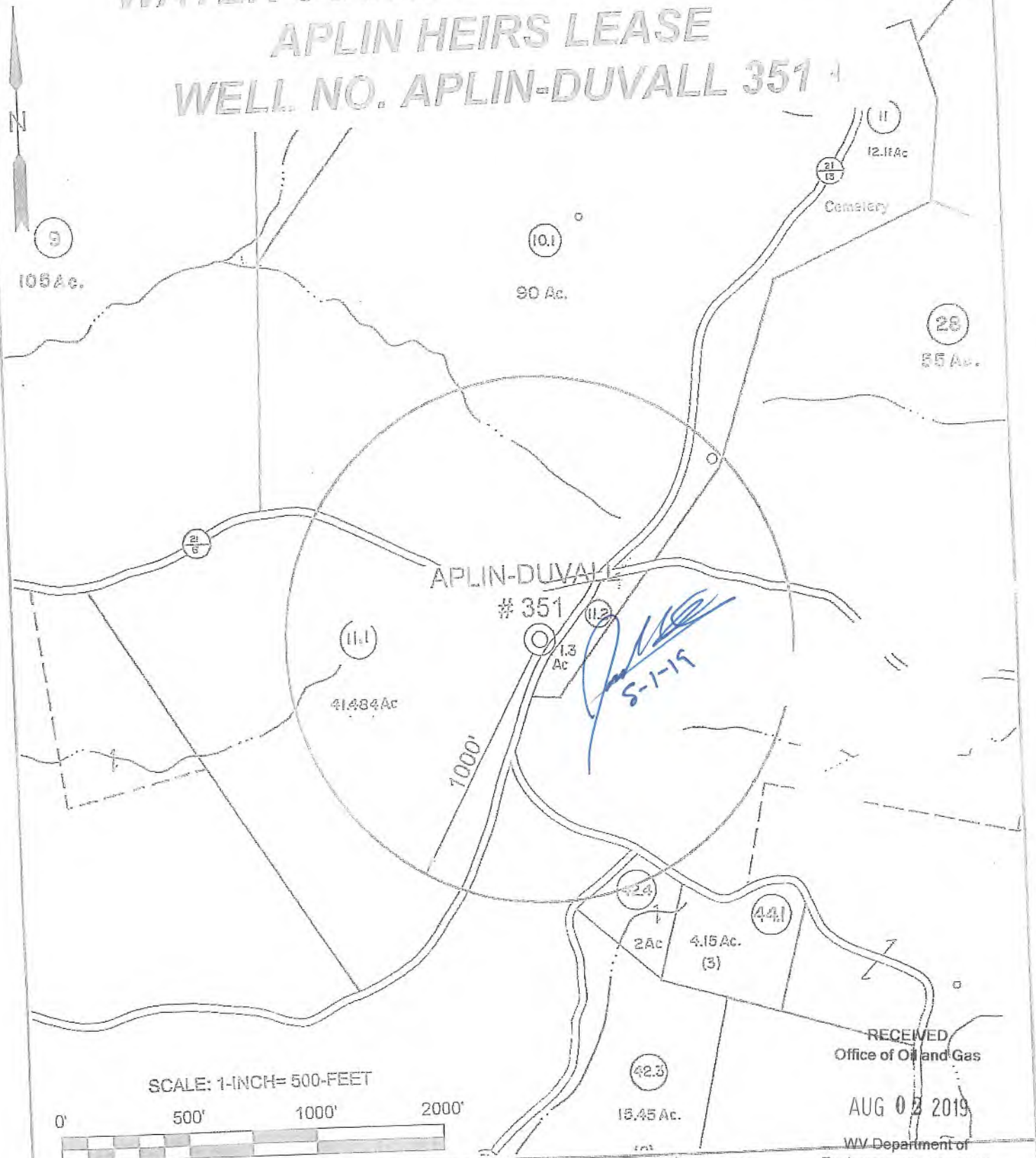
Wilbert E. Campbell & Joshua L. & Heidi Gorby ✓
49317 McClure Rd.
East Palestine, OH 44413

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Office of Oil and Gas

AUG 02 2019

WV Department of
Environmental Protection

WATER SOURCE LOCATIONS FOR APLIN HEIRS LEASE WELL NO. APLIN-DUVAL 351



RECEIVED
Office of Oil and Gas

AUG 02 2019

WV Department of

TOPO SECTION OF:
ROCKPORT, WV 7.5' QUAD

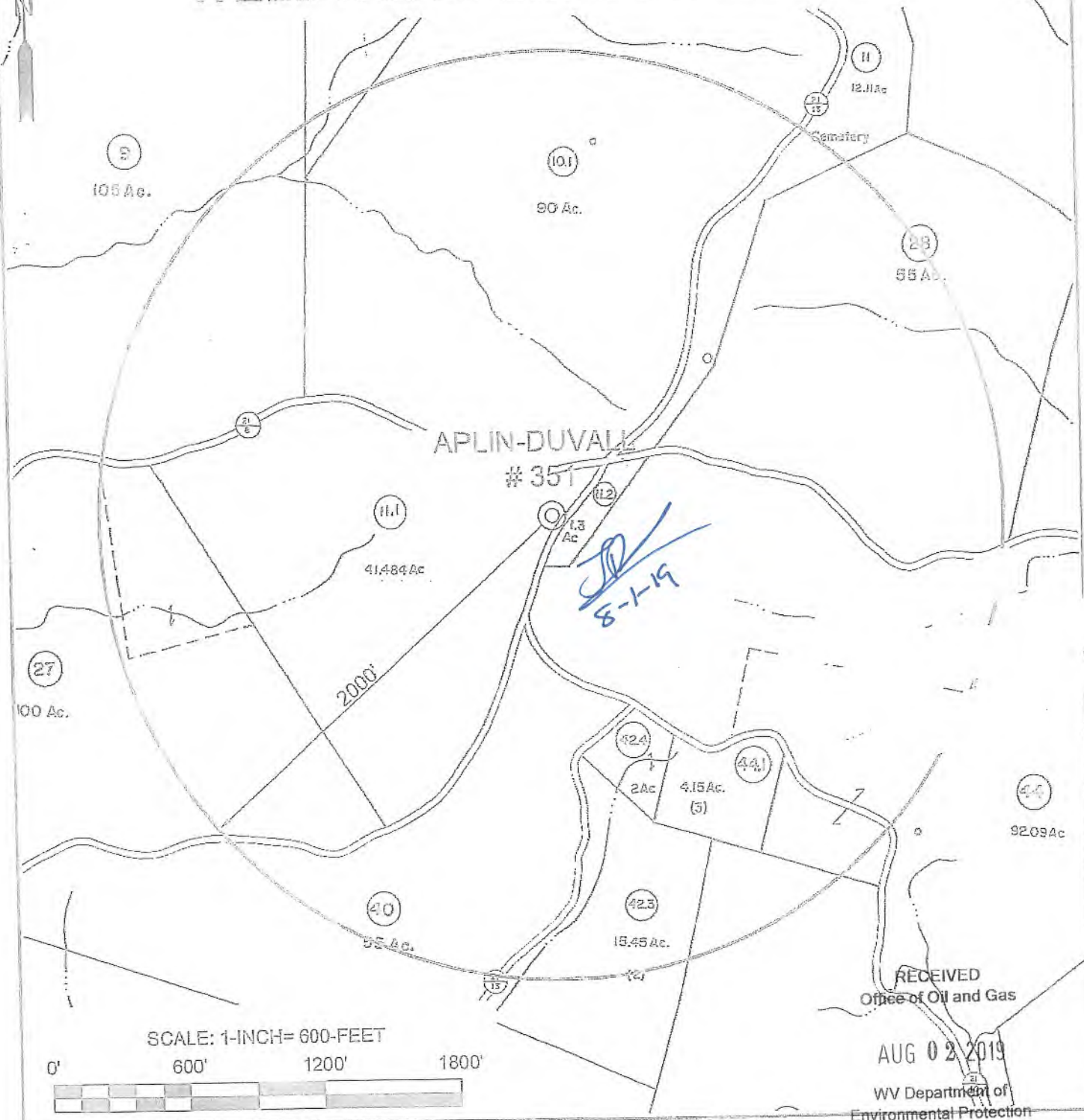
OPERATOR: Environmental Protection
MOUNTAINEER STATE ENERGY, INC
P.O BOX 27
SANDYVILLE, WV 25257

DISTRICT	COUNTY	TAX MAP-PARCEL NO.
GRANT	JACKSON	24-11.1



DRAWN BY	FILE NO	DATE	CADD FILE
CMS	XXXX	10/31/19	X:\2019\08-11-19

WATER SOURCE LOCATIONS FOR APLIN HEIRS LEASE WELL NO. APLIN-DUVALL 351 A



SLS
Land & Energy Development
Solutions from the ground up.
1000 10th Street, Suite 200, Charleston, WV 25301
www.slsenergy.com

DRAWN BY CMM	FILE NO. XXXX	DATE 10/01/18	CADD FILE 40000001000.dwg
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TOPO SECTION OF:
ROCKPORT, WV 7.5' QUAD

DISTRICT	COUNTY	TAX MAP-PARCEL NO.
GRANT	JACKSON	24-11.1

OPERATOR:
MOUNTAINEER STATE ENERGY, INC
P.O. BOX 27
SANDYVILLE, WV 25257

47-035-03030

WW-9
(5/16)

API Number 47 - _____ - _____
Operator's Well No. 351-A

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Mountaineer State Energy, Inc. OP Code 45650

Watershed (HUC 10) McGraw Run of Big Sandy Creek Quadrangle Rockport

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No

Will a pit be used? Yes No

If so, please describe anticipated pit waste: Drill Cuttings FW SW Gel Frac Water, Cement

Will a synthetic liner be used in the pit? Yes No If so, what ml.? 20 mil

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Will closed loop system be used? If so, describe: NO

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air - No oil Based Mud / Gel

-If oil based, what type? Synthetic, petroleum, etc. N/A

Additives to be used in drilling medium? KCL

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc.

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) Cement

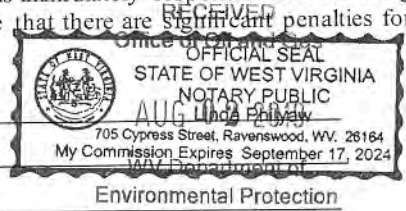
-Landfill or offsite name/permit number? _____

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature _____
Company Official (Typed Name) John D. Kent
Company Official Title V.P. and General Manager



Subscribed and sworn before me this 1ST day of August, 2019

Linda Philyaw Notary Public

My commission expires September 17, 2024



Proposed Revegetation Treatment: Acres Disturbed 3.8 Prevegetation pH 4.8 or 5.00

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 500/600 lbs/acre

Mulch Hay Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

Landowner Request

Southern States Mixture

or equivalent

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: Sediment Control in Place at all Times

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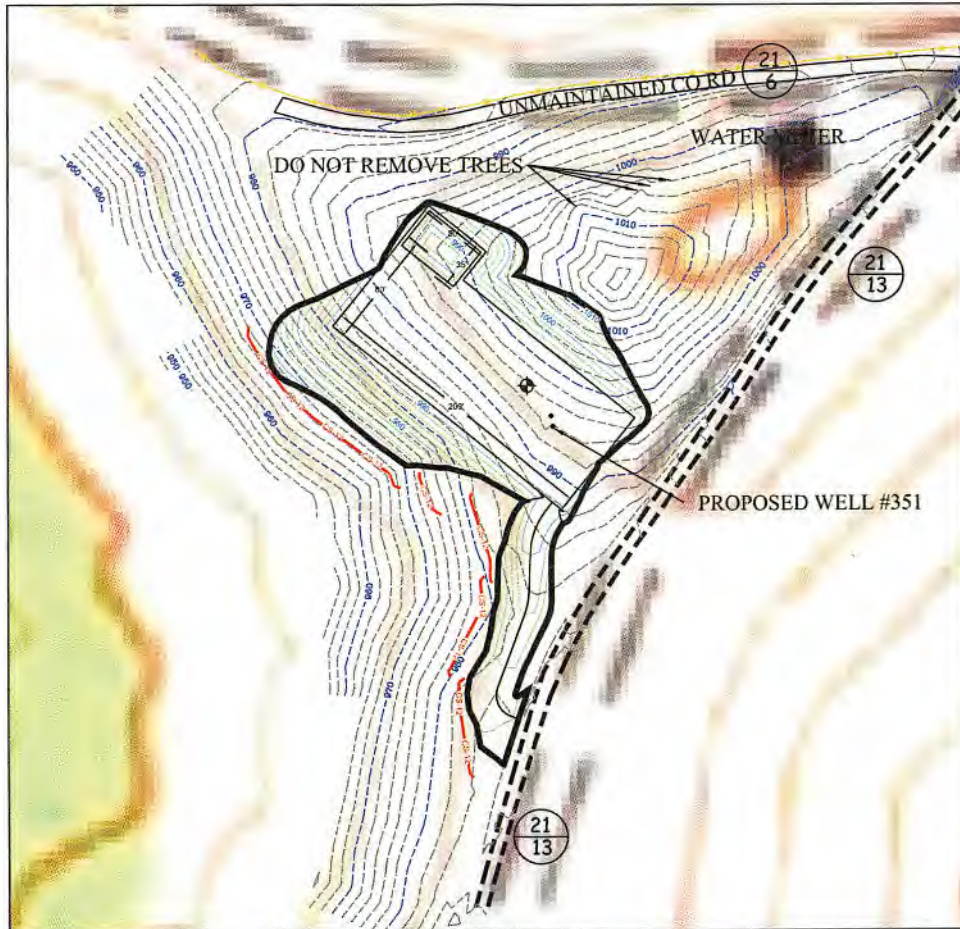
WV Department of Environmental Protection

Title: OOG Inspector

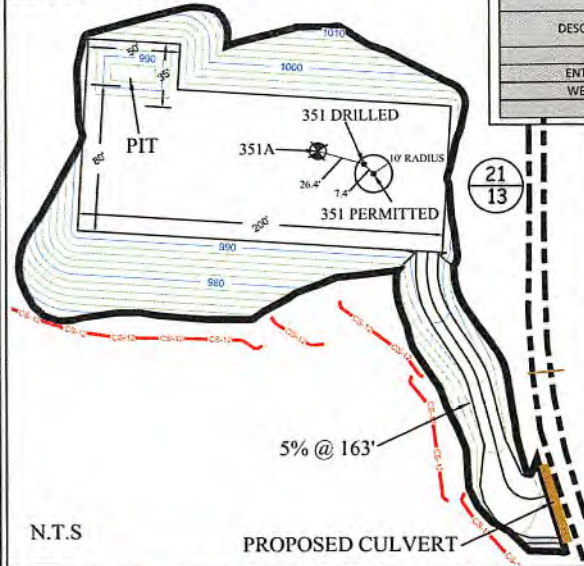
Date: 8-1-19

Field Reviewed? (X) Yes () No

APLIN-DUVALL WELL SITE WELL #351



DETAIL SKETCH



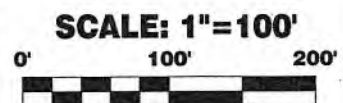
DESCRIPTION	EARTH WORK SUMMARY					LENGTH OF SLOPE (FT)
	CUT (CY)	FILL (CY)	SPOIL (CY)	BORROW (CY)	MAX SLOPE (%)	
PIT	91	-	91	-	N/A	N/A
ENTRANCE	16	530	-	514	5%	160
WELL PAD	2,808	2,008	800	-	N/A	N/A
TOTAL			891	514		

Elevation (ft)	Volume (Gallon)	Volume (Barrels)
992'	23,000	548
991'	17,000	405
990'	12,000	286
989'	8,000	190
988'	5,000	119
987'	2,000	48
986'	0	0

[Signature]
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 AUG 02 2019



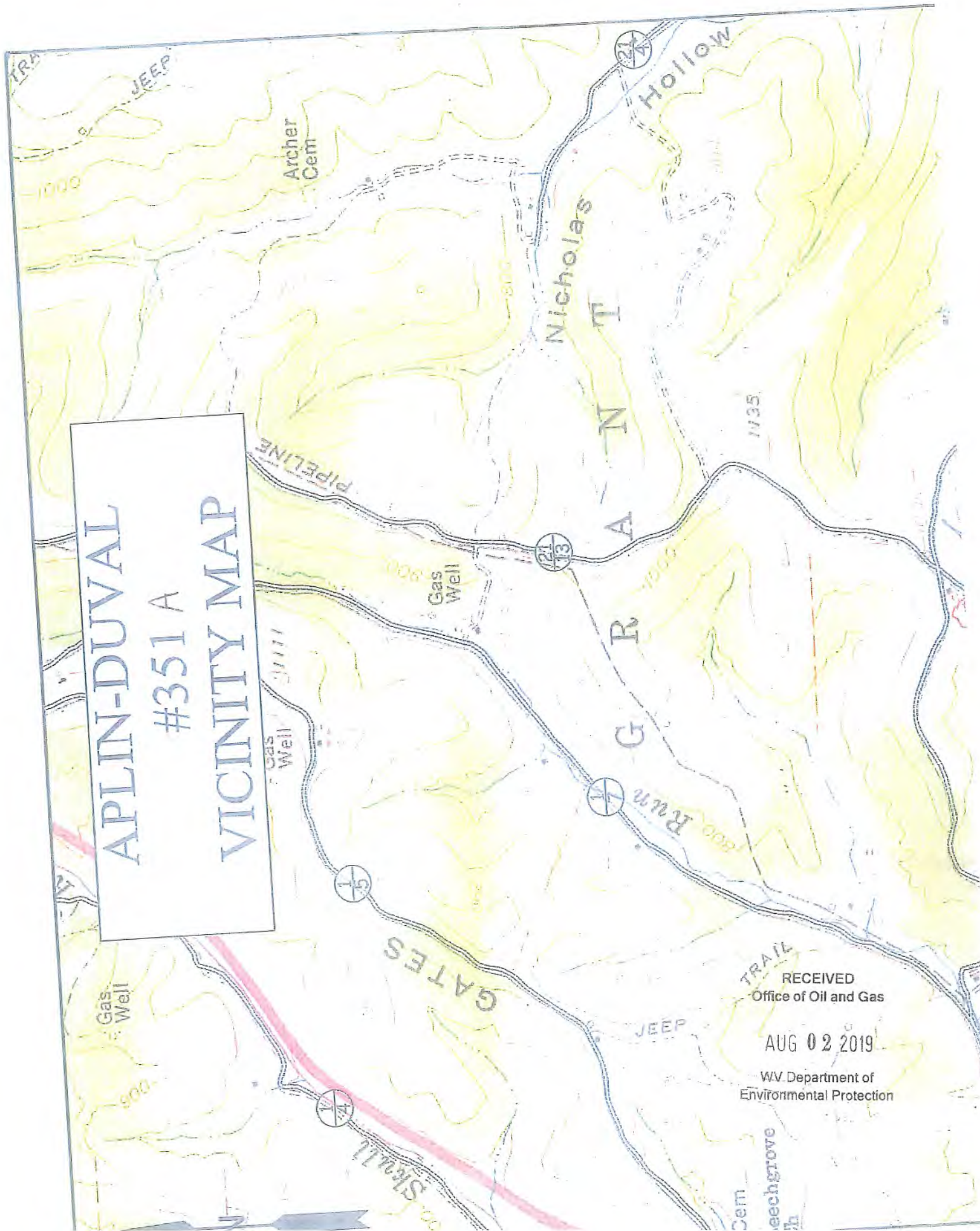
TOPO SECTIONS OF USGS
ROCKPORT
7.5' QUADRANGLES



DRAWN BY K.L.H	FILE NO. 8872	DATE 08-01-19	CADD FILE: 8872_FINALRECR1.DWG
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WV Department of
Environmental Protection

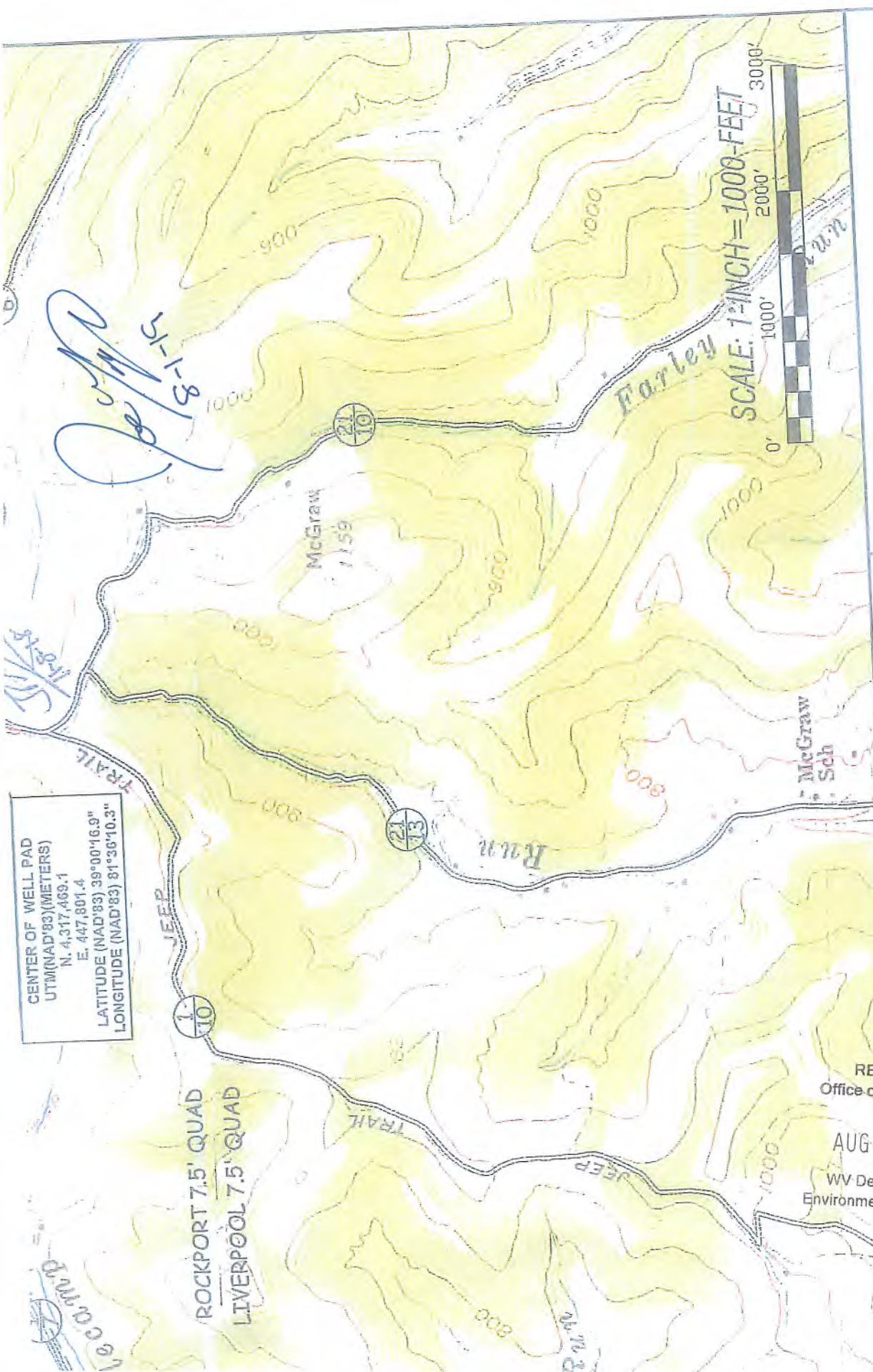
**APLIN-DUVAL
#351 A
VICINITY MAP**



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AUG 02 2019

WV Department of
Environmental Protection



OPERATOR:
 MOUNTAINEER STATE ENERGY, INC.
 P.O. BOX 27
 SANDYVILLE, WV 25275-0027

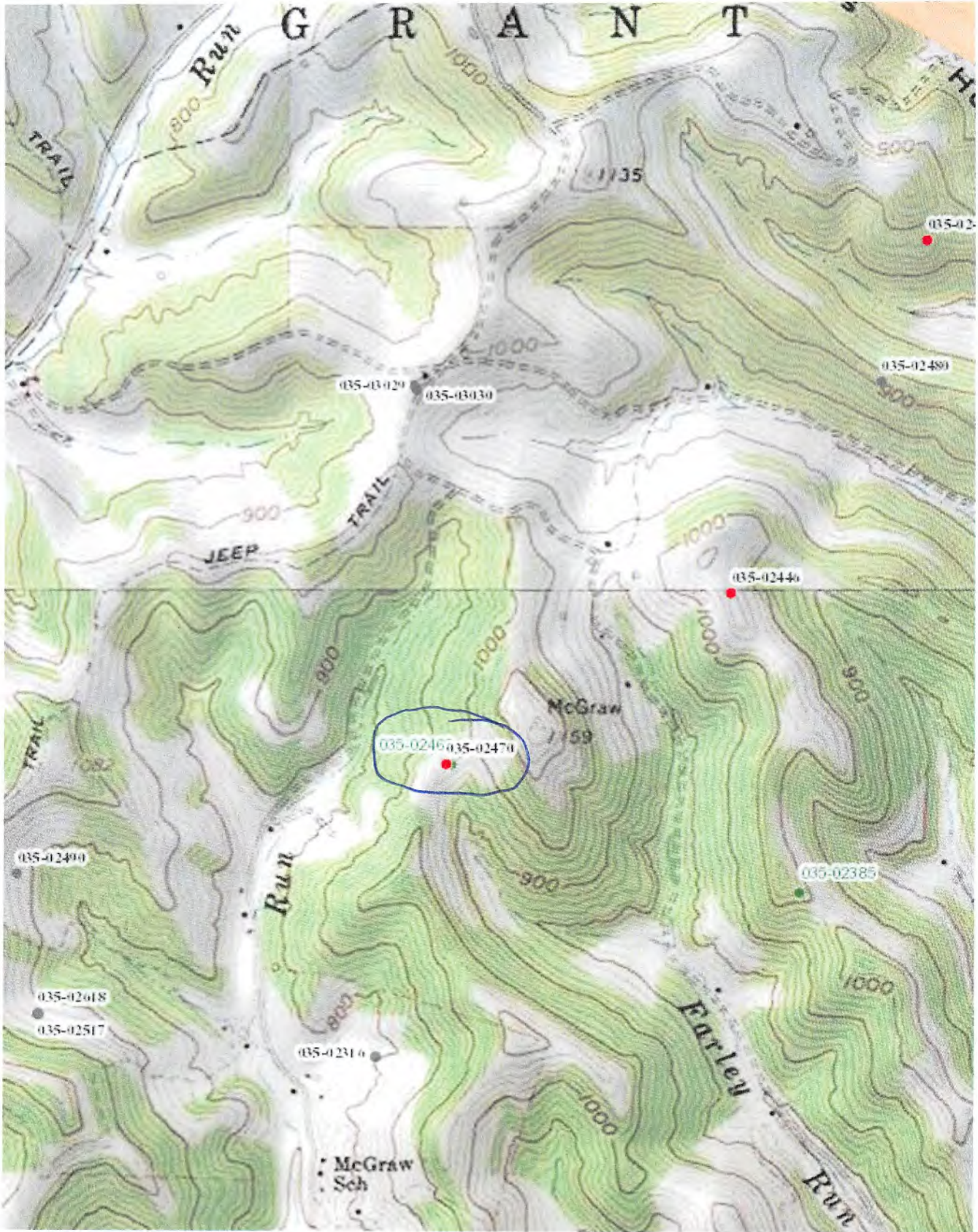
TOPO SECTIONS OF:
 LIVERPOOL & ROCKPORT WV 7.5' QUADS

COUNTY	JACKSON
DISTRICT	GRANT

RECEIVED
 Office of Oil and Gas
 AUG 02 2019
 WV Department of
 Environmental Protection



DRAWN BY	FILE NO.	DATE	CADD FILE:
K.G.M.	8363	10-22-18	63020011010101

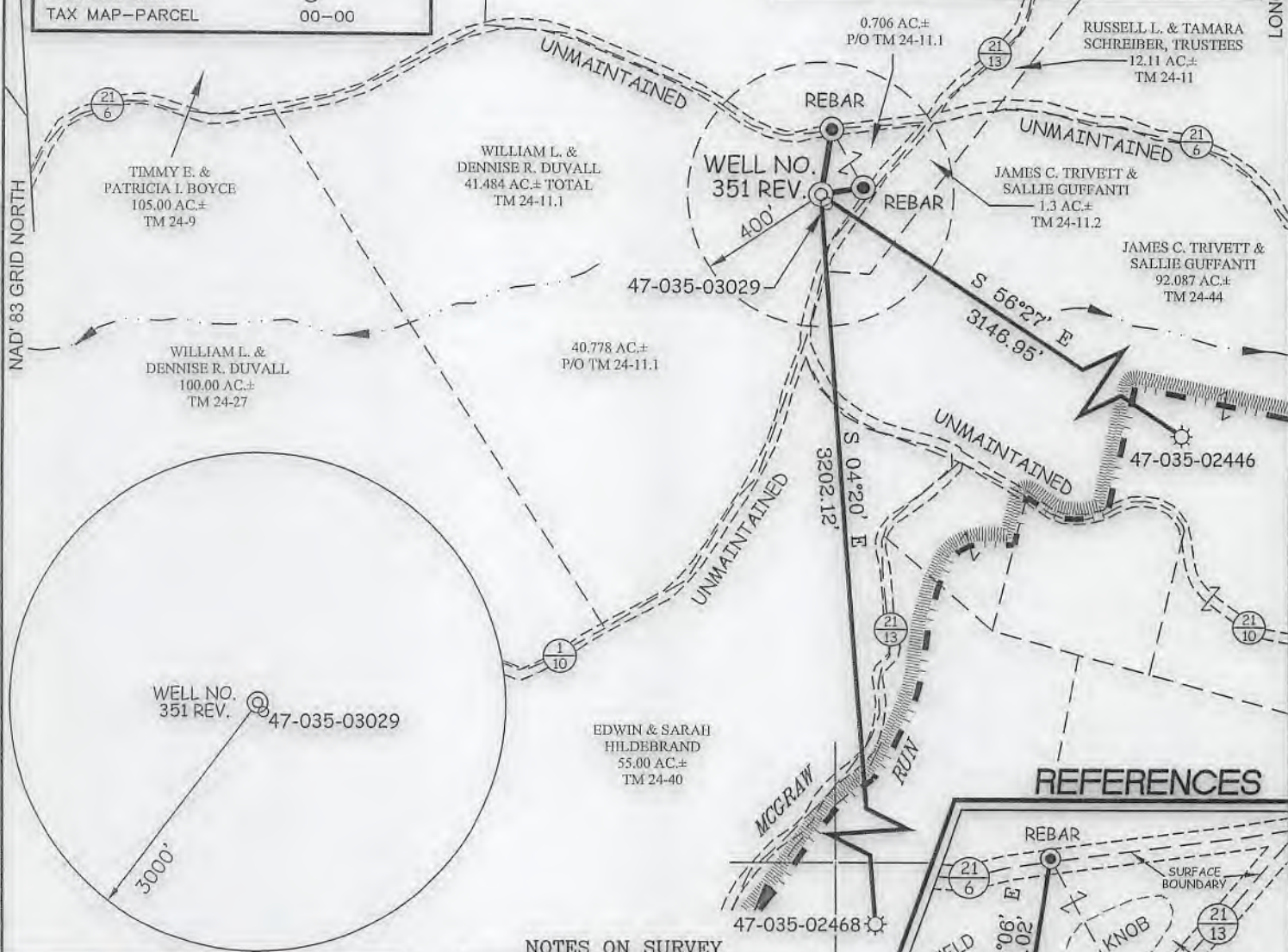


LEGEND

LEASE LINE	
SURFACE LINE	
TIE LINE	
CREEK	
ROAD	
COUNTY ROUTE	
STATE ROUTE	
PROPOSED WELL	
EXISTING WELL	
PERMITTED WELL	
TAX MAP-PARCEL	00-00

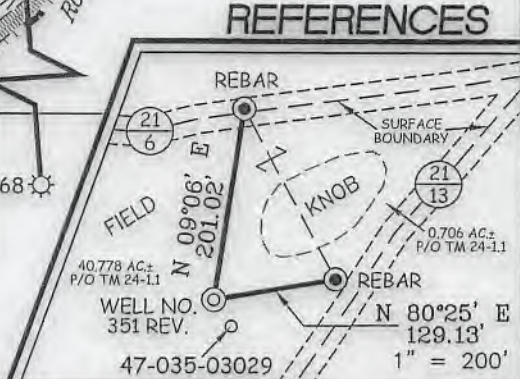
CHARLES W. BOYCE (LIFE) & TIMOTHY E. BOYCE
90.00 AC.±
TM 24-1.1

APLIN-DUVALL LEASE
1,880 ACRES±
WELL NO. 351 REV. A
 (S.P.C. SOUTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'27 S.P.C.(FT) N. 730,517.3 E. 1,828,668.1
 NAD'27 GEO. LAT-(N) 39.004578 LONG-(W) 81.602853
 NAD'83 UTM (M) N. 4,317,466.3 E. 447,814.3



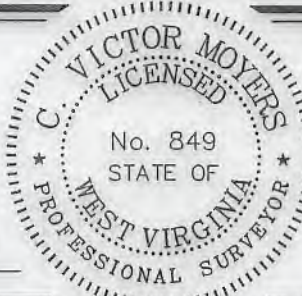
SLS
Land & Energy Development
Solutions from the ground up.
 P.O. Box 150 • 12 Vantom Drive • Glenville, WV 26351 • (304) 462-5634
 www.slsenv.com

- NOTES ON SURVEY**
1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
 2. APPROXIMATE LEASE BOUNDARY INFORMATION AS SHOWN PROVIDED BY MOUNTAINEER STATE ENERGY, INC.
 3. LAT/LONG GRID OFFSETS ARE NAD'83.



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. *C. Victor Moyers*
 849



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE OCTOBER 26, 20 18
 REVISED JULY 30, 20 19
 OPERATORS WELL NO. APLIN-DUVALL #351 REV.
 API WELL NO. 47-035-03030
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 8872P351R.dwg
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 500'

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: GROUND: 994' ELEVATION: PROPOSED: 992' WATERSHED: TRIBUTARY OF MAULECAMP RUN
 DISTRICT: GRANT COUNTY: JACKSON QUADRANGLE: ROCKPORT 7.5'

SURFACE OWNER: WILLIAM AND DENNISE DUVALL ACREAGE: 40.778 OF 41.484 ±
 ROYALTY OWNER: APLIN HEIRS ACREAGE: 1,880 ±

PROPOSED WORK: LEASE NO. 3656-1 THRU 117
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION: ORISKANY ESTIMATED DEPTH: 5,100'

WELL OPERATOR: MOUNTAINEER STATE ENERGY, INC. DESIGNATED AGENT: JOHN KENT
 ADDRESS: P.O. BOX 27 SANDYVILLE, WV 25275-0027 ADDRESS: P.O. BOX 27 SANDYVILLE, WV 25275-0027