

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

API 47 - 103 - 03187 County WETZEL District PROCTOR
Quad WILEYVILLE Pad Name DANIEL DURIG WTZ PAD Field/Pool Name VICTORY
Farm name DANIEL DURIG (REMAINDERMAN), ARTHUR & SHIRLEY ANN DURIG (LE) Well Number DANIEL DURIG WTZ 201H
Operator (as registered with the OOG) SWN PRODUCTION COMPANY, LLC
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,396,390.136 Easting 530,923.894
Landing Point of Curve Northing 4,396,147.344 Easting 530,684.818
Bottom Hole Northing 4,397,454.521 Easting 529,266.133

Elevation (ft) 1401.2' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
SOBM

Date permit issued 07/21/2017 Date drilling commenced 11/17/2017 Date drilling ceased 01/08/2018
Date completion activities began 05/07/2018 Date completion activities ceased 08/20/2018
Verbal plugging (Y/N) N Date permission granted N/A Granted by _____

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug
Freshwater depth(s) ft 427' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1,664' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1,167' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: DMH
2-21-19

API 47- 103 - 03187

Farm name DANIEL DURIG (REMAINDERMAN), ARTHUR & SHIRLEY ANN DURIG (LE)

Well number DANIEL DURIG WTZ 201H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24	20	126'	NEW	J-55/94#		Y
Surface	17.5	13.375	533'	NEW	J-55/54.50#		Y, 19 bbls
Coal	See Intermediate						
Intermediate 1	12.25	9.625	2,691'	NEW	J-55/36#		Y, 65 bbls
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	14,069'	NEW	HCP-110/20#		Y
Tubing		2.375	7,702'	NEW	L-80/4.7#		N
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	GROUT TO SURFACE				SURFACE	24
Surface	CLASS A	485	15.60	1.20	582	SURFACE	8
Coal	See Intermediate						
Intermediate 1	CLASS A	1,053	15.60	1.18	1,242.54	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	2,378	15.60	1.19	2,829.82	SURFACE	24
Tubing							

Drillers TD (ft) 14,071' Loggers TD (ft) 14,071'
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6,703'

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

SURFACE: 7 CENTRALIZERS - EVERY THIRD JOINT OF CASING
 INTERMEDIATE: 24 CENTRALIZERS - EVERY THIRD JOINT OF CASING
 PRODUCTION: 181 CENTRALIZERS - EVERY THIRD JOINT FROM SURFACE TO TOP OF CURVE, THEN EVERY JOINT UNTIL TD

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

**DANIEL DURIG WTZ 201H
ATTACHMENT 1
PERF REPORT**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	4/20/2018	13,889	13,757	33
2	5/7/2018	13,694	13,562	33
3	5/8/2018	13,499	13,367	33
4	5/10/2018	13,304	13,172	33
5	5/12/2018	13,109	12,977	33
6	5/13/2018	12,914	12,782	33
7	5/16/2018	12,719	12,587	33
8	5/17/2018	12,524	12,392	33
9	5/17/2018	12,329	12,197	33
10	5/20/2018	12,134	12,002	33
11	5/21/2018	11,939	11,807	33
12	5/21/2018	11,744	11,612	33
13	5/22/2018	11,549	11,417	33
14	5/23/2018	11,354	11,222	33
15	5/23/2018	11,159	11,027	33
16	5/24/2018	10,964	10,832	33
17	5/25/2018	10,769	10,637	33
18	5/26/2018	10,574	10,442	33
19	5/26/2018	10,379	10,247	33
20	5/27/2018	10,184	10,052	33
21	5/28/2018	9,989	9,857	33
22	5/29/2018	9,794	9,662	33
23	5/29/2018	9,599	9,467	33
24	5/30/2018	9,404	9,272	33
25	5/31/2018	9,209	9,077	33
26	5/31/2018	9,014	8,882	33
27	6/1/2018	8,819	8,687	33
28	6/1/2018	8,624	8,492	33
29	6/1/2018	8,429	8,297	33
30	6/2/2018	8,234	8,102	33
31	6/3/2018	8,039	7,907	33
32	6/3/2018	7,844	7,712	33

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**DANIEL DURIG WTZ 201H
ATTACHMENT 2
STIM REPORT**

STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment	Max Breakdown	ISIP (PSI)	Amount of Proppant (lbs)	Amount of water bbls	Amount of nitrogen/othe
1	5/7/2018	72	7,228	8,120	4,063	356,140	6,353	0
2	5/8/2018	78	7,536	8,173	4,733	386,520	6,591	0
3	5/10/2018	77	7,693	6,033	4,417	397,880	8,437	0
4	5/12/2018	76	7,491	5,729	4,434	396,940	7,586	0
5	5/13/2018	77	7,599	6,194	4,880	390,580	6,711	0
6	5/16/2018	78	7,039	5,795	3,994	384,260	6,936	0
7	5/17/2018	77	7,397	6,101	4,531	402,860	6,071	0
8	5/17/2018	79	7,341	6,039	4,568	400,270	6,095	0
9	5/20/2018	70	7,370	6,780	4,872	413,080	6,818	0
10	5/21/2018	79	6,951	5,945	4,372	405,560	6,061	0
11	5/21/2018	76	7,267	6,399	4,589	397,740	5,889	0
12	5/22/2018	75	7,192	6,452	5,064	406,020	7,309	0
13	5/23/2018	75	7,393	6,854	4,599	402,200	6,224	0
14	5/23/2018	76	7,392	6,714	5,223	389,145	5,750	0
15	5/24/2018	77	7,479	6,726	4,309	412,660	6,637	0
16	5/25/2018	75	7,426	7,308	4,341	416,120	6,434	0
17	5/25/2018	14	6,890	6,835	5,671	6,573	2,717	0
18	5/26/2018	40	6,419	6,419	5,281	5,118	3,693	0
19	5/27/2018	63	8,122	6,154	4,917	2,508	1,883	0
20	5/27/2018	80	6,834	5,903	3,990	401,281	6,106	0
21	5/29/2018	78	7,110	6,327	4,798	400,540	5,839	0
22	5/29/2018	75	7,167	6,903	4,931	393,276	6,147	0
23	5/30/2018	66	7,317	7,829	4,288	393,900	6,894	0
24	5/30/2018	79	7,278	8,007	4,619	385,540	5,412	0
25	5/31/2018	75	7,588	8,588	5,473	397,600	5,589	0
26	5/31/2018	77	7,769	6,380	4,581	394,120	5,398	0
27	6/1/2018	78	7,498	8,392	4,246	400,080	6,143	0
28	6/1/2018	83	7,187	8,356	4,199	393,160	5,569	0
29	6/2/2018	81	7,210	8,399	4,725	399,340	6,952	0
30	6/2/2018	78	7,137	8,777	5,301	405,660	6,564	0
31	6/3/2018	80	6,970	6,250	4,306	389,500	6,001	0
32	6/3/2018	77	7,082	8,554	4,247	396,880	6,112	0

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Well Name: Daniel Durig Wtz 201H

47103031870000

Attachment 3

LITHOLOGY/FORMATION	TOP DEPTH, MD (FT)	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, MD (FT)	BOTTOM DEPTH, TVD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	0.00	0.00	427.00	427.00	
Top of Salt Water	1664.00	1664.00	NA	NA	
Pittsburgh Coal	1167.00	1167.00	1239.00	1239.00	
Pottsville (ss)	1239.00	1239.00	1259.00	1259.00	
Mauch Chunk (shale)	NA	NA	NA	NA	
Raven Cliff (ss)	1682.00	1682.00	1951.00	1951.00	
Maxton (ss)	1951.00	1951.00	NA	NA	
Greenbriar (ls)	NA	NA	NA	NA	
Big Injun (ss)	2325.00	2325.00	2911.00	2911.00	
Berea (siltstone)	2911.00	2911.00	6584.00	6584.00	
Rhinestreet (shale)	6584.00	6584.00	6984.00	6939.00	
Cashaqua (shale)	6984.00	6939.00	7035.00	6982.00	
Middlesex (shale)	7145.00	6985.00	7253.00	7066.00	
Burket (shale)	7253.00	7066.00	7293.00	7093.00	
Tully (ls)	7293.00	7093.00	7329.00	7116.00	
Mahantango (shale)	7329.00	7116.00	7597.00	7221.00	
Marcellus (shale)	7597.00	7221.00	NA	NA	GAS

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/7/2018
Job End Date:	6/3/2018
State:	West Virginia
County:	Wetzel
API Number:	47-103-03187-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Daniel Durig WTZ 201
Latitude:	39.71682195
Longitude:	-80.63920640
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,226
Total Base Water Volume (gal):	8,006,670
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Econo-CI200	SWN Well Services	Corrosion Inhibitor					
				Listed Below			
HCL	SWN Well Services	Solvent					
				Listed Below			

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SCAL16486A	Nalco	Scale Inhibitor					
				Listed Below			
Base Water	Operator	Base Fluid					
				Listed Below			
BIOC11219A	Nalco	Biocide					
				Listed Below			
Sand	SWN Well Services	Proppant					
				Listed Below			
FLOJET DRP 1130 X	SWN Well Services	Friction Reducer					
				Listed Below			
FLOJET DR 9000 LPP	SWN Well Services	Friction Reducer					
				Listed Below			
Ecopol-FEAC	SWN Well Services	Iron Control					
				Listed Below			

Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.

		Water	7732-18-5	100.00000	84.26128	Density = 8.345
		Crystalline Silica, quartz	14808-60-7	100.00000	14.53173	
		Water	7732-18-5	85.00000	0.95932	
		Hydrochloric Acid	7647-01-0	15.00000	0.16215	
		Petroleum Distillates, Hydrotreated	64742-47-8	45.00000	0.03925	

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			Methanol	67-56-1	60.00000	0.01515	
			Ethylene glycol	107-21-1	10.00000	0.01041	
			Benzyl-(C12-C16 Alky)- Dimethyl-Ammonium	68424-85-1	30.00000	0.00758	
			Chloride Glutaraldehyde	111-30-8	10.00000	0.00253	
			Acetic Acid	64-19-7	37.50000	0.00229	
			Alcohols, C12- C16,Ethoxylated propoxylated	68213-24-1	2.00000	0.00174	
			Fatty alcohols ethoxylated	Proprietary	2.00000	0.00174	
			Amine Triphosphate	Proprietary	30.00000	0.00169	
			Methanol	67-56-1	80.00000	0.00141	
			Citric Acid	77-92-9	22.50000	0.00138	
			Oxyalkylated fatty acid	68951-67-7	9.67400	0.00017	
			Fatty acids	61790-12-3	5.02700	0.00009	
			Modified thiourea polymer	68527-49-1	4.74600	0.00008	
			Potassium acetate	127-08-2	0.02200	0.00000	
			Formaldehyde	50-00-0	0.00400	0.00000	

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

NO DISCHARGE

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Discharge Monitoring Report
Oil and Gas General Permit

Company Name: SWN PRODUCTION COMPANY, LLC
API No: 47-103-03187 County: WETZEL
District: PROCTOR Well No: DANIEL DURIZ WTZ 201H
Farm Name: DANIEL DURIG (REMAINDERMAN), ARTHUR DURIG & SHIRLEY ANN DURIG (LE)
Discharge Date/s From:(MMDDYY) _____ To: (MMDDYY) _____
Discharge Times. From: _____ To: _____
Total Volume to be Disposed from this facility (gallons): _____
Disposal Option(s) Utilized (write volumes in gallons): _____

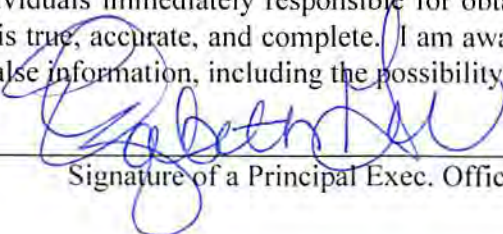
- (1) Land Application: _____ (Include a topographical map of the Area.)
- (2) UIC: _____ Permit No. _____
- (3) Offsite Disposal: _____ Site Location: _____
- (4) Reuse: _____ Alternate Permit Number: _____
- (5) Centralized Facility: _____ Permit No. _____
- (6) Other method: _____ (Include an explanation)

Follow Instructions below to determine your treatment category:

- Optional Pretreatment test: _____ Cl- mg/l _____ DO mg/l
1. Do you have permission to use expedited treatment from the Director or his representative?
(Y/N) _____ If yes, who? _____ and place a four (4) on line 7.
If not go to line 2
 2. Was Frac Fluid or flowback put into the pit? (Y/N) _____ If yes, go to line 5. If not, go to line 3.
 3. Do you have a chloride value pretreatment (see above)? (Y/N) _____ If yes, go to line 4
If not, go to line 5.
 4. Is the Chloride level less than 5000 mg/l? (Y/N) _____ If yes, then enter a one (1) on line 7.
 5. Do you have a pretreatment value for DO? (See above) (Y/N) _____ If yes, go to line 6
If not, enter a three (3) in line 7.
 6. Is the DO level greater than 2.5 mg/l?(Y/N) _____ If yes, enter a two (2) on line 7. If not, enter a three (3) on line 7.
 7. _____ is the category of your pit. Use the Appropriate section.
 8. Comments on Pit condition: _____

Name of Principal Exec. Officer: _____
Title of Officer: _____
Date Completed: _____

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



Signature of a Principal Exec. Officer or Authorized agent.

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Category 1
Sampling Results
API No : _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	5	_____	N/A	N/A	Days
Fe	6	_____	6	_____	mg/l
D.O.	2.5	_____	2.5	_____	mg/l
Settleable Sol.	0.5	_____	0.5	_____	mg/l
Cl	5,000	_____	5,000	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**			Monitor	_____	mg/l
Oil and Grease			Monitor	_____	mg/l
Total Al***			Monitor	_____	mg/l
TSS			Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume			Monitor	_____	Gal
Flow			Monitor	_____	Gal/min
Disposal Area			Monitor	_____	Acres

*** Al is only reported if the pH is above 9.0

Category 2
Sampling Results
API No : _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	10	_____	N/A	N/A	Days
Fe	6	_____	6	_____	mg/l
D.O.	2.5	_____	2.5	_____	mg/l
Settleable Sol.	0.5	_____	0.5	_____	mg/l
Cl*	12,500	_____	12,500	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**			Monitor	_____	mg/l
Oil and Grease			Monitor	_____	mg/l
Total Al***			Monitor	_____	mg/l
TSS			Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume			Monitor	_____	Gal
Flow			Monitor	_____	Gal/min
Disposal Area			Monitor	_____	Acres

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____

Date: _____

** Include a description of your aeration technique.

Aeration Code: _____

*** Al is only reported if the pH is above 9.0

Category 3
Sampling Results
API No : _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	20	_____	N/A	N/A	Days
Fe	6	_____	6	_____	mg/l
D.O.	2.5	_____	2.5	_____	mg/l
Settleable Sol.	0.5	_____	0.5	_____	mg/l
Cl*	12,500	_____	12,500	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**			Monitor	_____	mg/l
Oil and Grease			Monitor	_____	mg/l
Total Al***			Monitor	_____	mg/l
TSS			Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume			Monitor	_____	Gal
Flow			Monitor	_____	Gal/min
Disposal Area			Monitor	_____	Acres

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____ Date: _____
 ** Include a description of your aeration technique. Aeration Code: _____
 *** Al is only reported if the pH is above 9.0.

Category 4
Sampling Results
API No: _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	1	_____	N/A	N/A	Days
Fe	Monitor	_____	Monitor	_____	mg/l
D.O.	Monitor	_____	Monitor	_____	mg/l
Settleable Sol.	Monitor	_____	Monitor	_____	mg/l
Cl*	12,500	_____	12,500	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**			Monitor	_____	mg/l
Oil and Grease			Monitor	_____	mg/l
TSS			Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume			Monitor	_____	Gal
Flow			Monitor	_____	Gal/min
Activated Carbon (0.175)			N/A	N/A	lb/Bl
Date Site Reclaimed	N/A	N/A			10 days from date
Disposal Area			Monitor	_____	Acres

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____ Date: _____

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Latitude: 39°45'00" SURFACE HOLE 3,995'

JACKSON SURVEYING INC. Latitude: 39°45'00"

BOTTOM HOLE 9,420'

INC.

P.O. Box 1460
677 W. Main St.
Clarksburg, WV 26302
304-623-5851

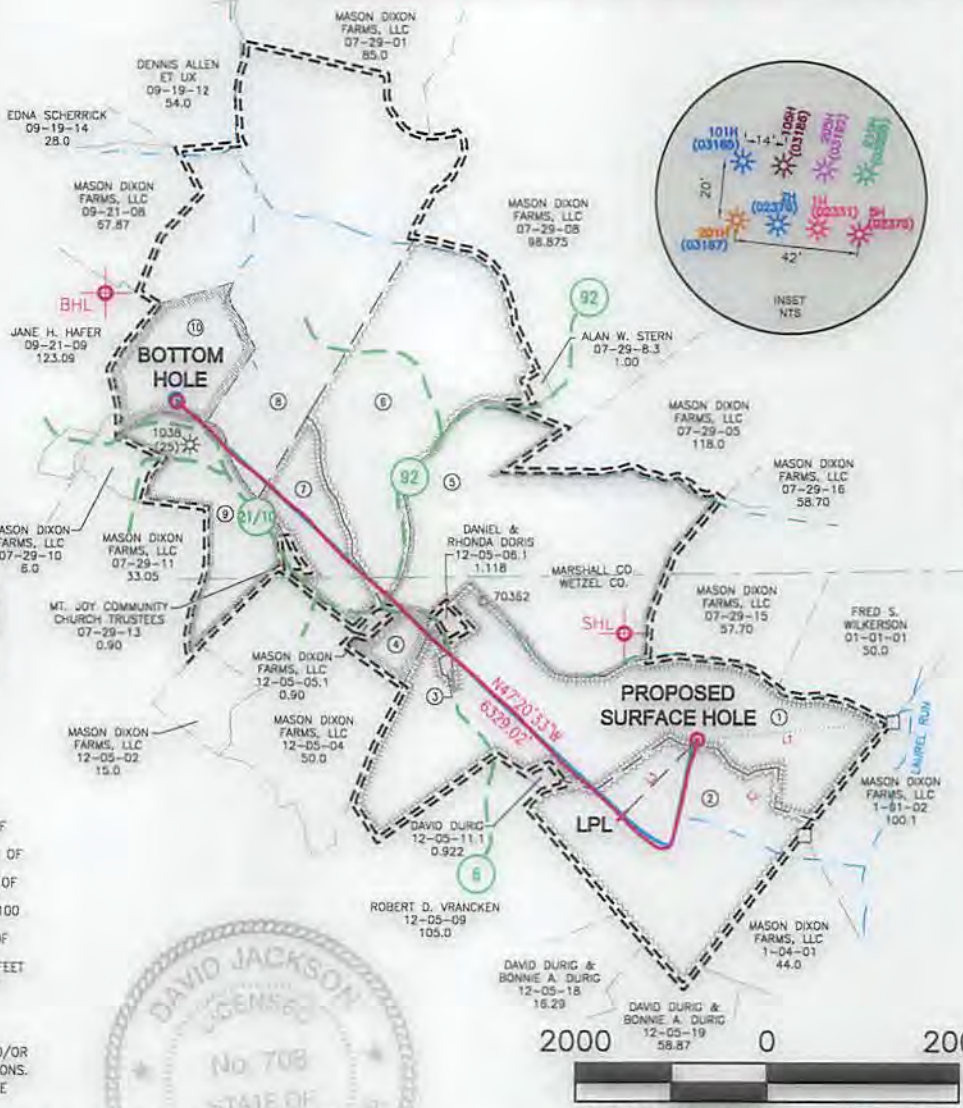
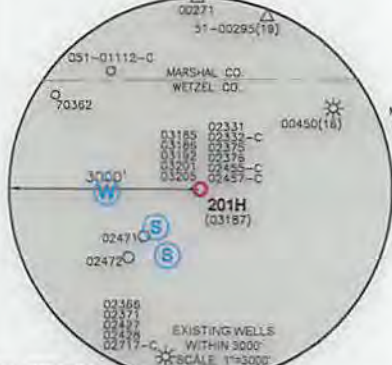
SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,390.211 EASTING: 530,924.111
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,151.512 EASTING: 530,688.686
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,397,462.402 EASTING: 529,260.402

GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS				
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES	
1	DANIEL DURIG (REMAINDERMAN), ARTHUR DURIG AND SHIRLEY ANN DURIG (L/E) (S/R)	12-05-06	151.58	
TRACT	SURFACE OWNER	TAX PARCEL	ACRES	
2	DANIEL DURIG (REMAINDERMAN), ARTHUR DURIG & SHIRLEY ANN DURIG (L/E) (S)	12-05-11	85.5	
3	DAVID DURIG AND RHONDA K. DURIG (S)	12-05-6.2	0.5	
4	DANIEL DURIG (REMAINDERMAN), ARTHUR DURIG AND SHIRLEY ANN DURIG (L/E) (S)	12-05-05	9.1	
5	MASON DIXON FARMS, LLC (S)	07-29-14	129.4	
6	ALTON W. STERN, (LIFE ESTATE), ALAN W. STERN, DIANE E. STERN, DEBORAH E. PERRIS, BEVERLY J. DAVENPORT (REMAINDERMEN) (S)	07-29-8.1	109.0	
7	MASON DIXON FARMS, LLC (S)	07-29-8.2	52.125	
8	MASON DIXON FARMS, LLC (S)	07-29-07	162.00	
9	MASON DIXON FARMS, LLC (S)	07-29-12	29.16	
10	MASON DIXON FARMS, LLC (S)	07-29-09	25.0	

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,390.136 EASTING: 530,923.894
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,147.344 EASTING: 530,684.818
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,397,454.521 EASTING: 529,265.133

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 84°47'17" E	2045.28'	SHL TO LANDMARK	FENCE CORNER
L2	S 48°31'00" E	1492.86'	SHL TO LANDMARK	FD. MARKED STONE
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	S 44°33'30" W	1117.92'	1779.38'	SHL TO LP



WELL RESTRICTIONS

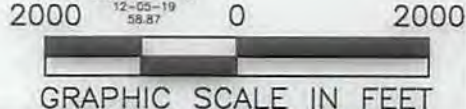
- NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
- PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
- NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

NOTES ON SURVEY

- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.
- 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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



P.S. 708 *David L. Jackson*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SURVEY SOURCE OF ELEVATION: GRADE GPS (NAVD 88, US FT)

COMPANY: **SWN** Production Company, LLC

DANIEL DURIG WTZ
OPERATOR'S WELL #: 201H
API WELL #: 47 103 03187
STATE COUNTY PERMIT

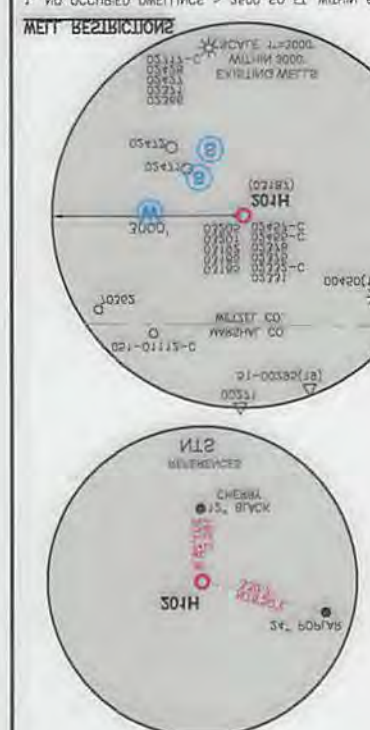
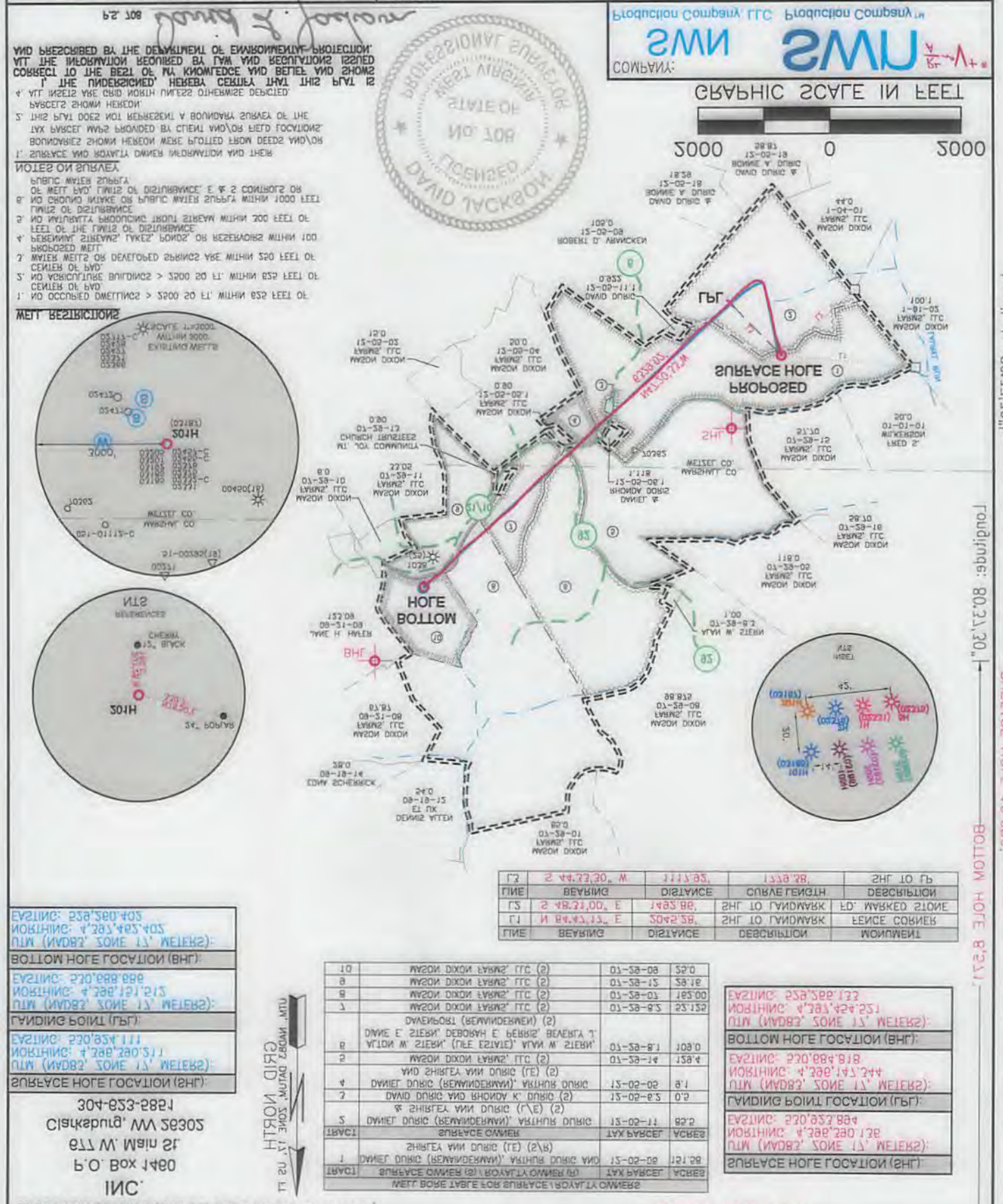
WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW
WATERSHED: LAUREL RUN - (HUC-10 FISH CREEK) ELEVATION: 1401.2'
DISTRICT: PROCTOR COUNTY: WETZEL QUADRANGLE: WILEYVILLE, WV
SURFACE OWNER: DANIEL DURIG (REMAINDERMAN), ARTHUR DURIG & SHIRLEY ANN DURIG (L/E) ACREAGE: ±151.58
OIL & GAS ROYALTY OWNER: O.C. YOHO AND MARY YOHO (ARTHUR T. DURIG AND SHIRLEY ANN DURIG (LIFE ESTATE), DANIEL DURIG (REMAINDERMAN) ACREAGE: ±151.58
DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) ASDRILLED
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,249 TVD 14,071 TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY
ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

LEGEND:	○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— SURVEYED BOUNDARY
★ EXISTING / PRODUCING WELLHEAD	— DRILLING UNIT	— LEASE BOUNDARY
LPL★ LANDING POINT LOCATION	— ASDRILLED PATH	— PROPOSED PATH
⊕ EXISTING WATER WELL		
⊙ EXISTING SPRING		
REVISIONS:		DATE: 10-02-2018
		DRAWN BY: N. MANO
		SCALE: 1" = 2000'
		DRAWING NO:
		WELL LOCATION PLAT

EXISTING 26KMC EXISTING WATER METT ГБГ* GUIDING POINT LOCATION EXISTING \ БҮӨБӨРСНИЙ МЕТТ/МЕТТ БҮӨБӨРСӨД ЗУВЬСАН НОГЕ \ БОЛОН НОГЕ ГЕОИД:	БҮӨБӨРСӨД БҮГД ҮЗДБИГТ БҮГД ГЕҮЭ БОЛОНДЫН ДИЛГИЙН ЦУМ ЗУВЬСАН БОЛОНДЫН	МЕГТ ГОЦАЛИЙН БҮГД ДҮБҮЙН ИД: СКАЛЕ: 1" = 3000' ДҮБҮЙН БҮ: И' МАНО DATE: 10-05-2018
CITY: ҮЙМ ГЕМ STATE: ММ ZIP CODE: 38218 ADDRESS: Б'О' БОХ 1300 МЕГТ ОВЕРЛОУ: ЗМИ БҮӨБӨРСНИЙ СОМБАН, ГТС	CITY: ҮЙМ ГЕМ STATE: ММ ZIP CODE: 38218 ADDRESS: Б'О' БОХ 1300 DESIGNATED AGENT: БРИТАН ВУДИ	ESTIMATED DEPTH: 1'548' IAD 14'031' IAD
LABEL FORMATION: МАКСЕТТ2 СОМБАН <input type="checkbox"/> БҮГС & АВАЙОН <input type="checkbox"/> СТЕЙН ОУЛ & ВЕРГС <input type="checkbox"/> ОНЕР ЧАНСЕ <input checked="" type="checkbox"/> (ЗӨСӨЛ) ҮЗДБИГТ ДВИГ <input type="checkbox"/> ДВИГ ДӨӨРӨС <input type="checkbox"/> ВЕДВИГ <input type="checkbox"/> БҮСЛӨКӨ ОУ ДИМГИЙН <input type="checkbox"/> БҮГС ОУЛ ОУД ГОРМАЦИОН <input type="checkbox"/> ВЕРӨВӨРӨТ ИЕМ ГОРМАЦИОН <input type="checkbox"/>	ОИГ & САЗ БОЛОНГ ОМНЕР ОУС ЛОНО УИД МҮБЭ ЛОНО (АХИЛНБ 1' ДУИС УИД ЗИВГЭЛ УИИ ДУИС (ГҮЭ ЭГЭЙЛ) ДАИЕГ ДУИС (ВЕРМИДЕВМАН) АСБЕҮС: 7121'28 ЗУВЬСАН ОМНЕР ДАИЕГ ДУИС (ВЕРМИДЕВМАН) АХИЛНБ ДУИС & ЗИВГЭЛ УИИ ДУИС (ГҮЭ) АСБЕҮС: 7121'28 ДИСТИК: БҮӨБӨРС СОМБАН: МЕЛСЕТ ОУАДЫНГЕ: МИГЕЛМГЕ' ММ МАТЕРИАЛ: ГАНБЕГ ВЛИ - (НУС-10 БИЖ СӨӨК) ЕГЭЛЦИОН: 1401'3, МЕГТ ТҮБЕ: ОИГ <input type="checkbox"/> МҮБЭ ДИЗӨСӨГ <input type="checkbox"/> БҮӨБӨРСНИЙ <input checked="" type="checkbox"/> ДӨӨР <input type="checkbox"/> САЗ <input checked="" type="checkbox"/> ГИОНД ИМЕСЦИОН <input type="checkbox"/> ЗЛОУСАГ <input type="checkbox"/> ЗИМТОН <input checked="" type="checkbox"/>	

CHARGES/TON, ММ 2023+ 801 211H 21BEEB OFFICE OF OIG & SAZ MADEB UNITED STATES TOPOGRAHIC MAPS (+) DENOTES LOCATION OF MEET ON	ELEVATION: (ИМД 88' НЭ ГҮЭ) ЗОНЦСӨ ОУ БҮӨЛӨИ АССУБАСА: ДЕСРЕЕ ОУ МИНИМУМ	STATE COUNTY PERMIT ҮЙ МЕГТ #: 74 103 03187
	1/300 ОВЕРЛОУ, 2 МЕГТ #: 301H ДАИЕГ ДУИС МЛЗ	



ELEVATION: 230'884'403 MONUMENT: 4'283'485'403 ПИМ (ИМДӨС ЗОНЕ 13' МЕЛСЕТ):
BOTTOM HOLE LOCATION (BHG): ELEVATION: 230'884'888 MONUMENT: 4'288'191'213 ПИМ (ИМДӨС ЗОНЕ 13' МЕЛСЕТ):
GUIDING POINT (ГБГ): ELEVATION: 230'854'111 MONUMENT: 4'288'280'311 ПИМ (ИМДӨС ЗОНЕ 13' МЕЛСЕТ):
SURFACE HOLE LOCATION (SHG): 304-833-2821 САНХАРИН, ММ 38305 811 W Main St Б'О' БОХ 1480 INC. JACKSON SURVEYING

ГЗ	2 44.72.30, M	1113'85,	1338'28,	ЗНГ 10 ГБ
ГИНЕ	БЕВЭЙН	ДИСТИНС	СУБЛЕ ГЕНДН	ДЕСЦЫЦИОН
ГЗ	2 48.21.00, E	1485'88,	ЗНГ 10 ГИОНДЫН	ЕД: МАРКЕД ЗЛОУ
ГЗ	И 84.43.13, E	3042'58,	ЗНГ 10 ГИОНДЫН	ФЕИС СОМБЕР
ГИНЕ	БЕВЭЙН	ДИСТИНС	ДЕСЦЫЦИОН	МОИМЕНТ
10	МУСОН ДИХОН ЛАВАНЗ' ГТС (2)	01-28-08	52'0	
8	МУСОН ДИХОН ЛАВАНЗ' ГТС (2)	01-28-13	58'18	
9	МУСОН ДИХОН ЛАВАНЗ' ГТС (2)	01-28-03	183'00	
3	МУСОН ДИХОН ЛАВАНЗ' ГТС (2)	01-28-10	215'28	
1	ДУАЙСЬОЛ (ВЕРМИДЕВМАН) (2)			
8	ДУИЕ Е ЗИВЭН ДӨВӨРӨН Е ВЕРБС ВЕЛБЭГ 1' УГЛОИ М ЗИВЭН (ГҮЭ ЭГЭЙЛ) УИИ М ЗИВЭН	01-28-8'1	108'0	
2	МУСОН ДИХОН ЛАВАНЗ' ГТС (2)	01-28-14	158'4	
4	УИИ ЗИВГЭЛ УИИ ДУИС (ГҮЭ) (2)			
7	ДАИЕГ ДУИС (ВЕРМИДЕВМАН) АХИЛНБ ДУИС	15-02-02	8'1	
2	ДУИЕГ ДУИС АИД УИНОДУ К ДУИС (2)	15-02-02	0'2	
5	УИИ ЗИВГЭЛ УИИ ДУИС (ГҮЭ) (2)			
2	ДАИЕГ ДУИС (ВЕРМИДЕВМАН) АХИЛНБ ДУИС	15-02-11	88'2	
1	ДУИЕГ ДУИС (ВЕРМИДЕВМАН) АХИЛНБ ДУИС АИД УИНОДУ К ДУИС (2)	15-02-08	121'88	
1	ДУИЕГ ДУИС (ВЕРМИДЕВМАН) АХИЛНБ ДУИС АИД УИНОДУ К ДУИС (2)	15-02-08	121'88	

ПИМ ИМДӨС ЗОНЕ 13' МЕЛСЕТ
 GRID NORTH