



west virginia department of environmental protection

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

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

February 27, 2015

WELL WORK PERMIT
Secondary Recovery Well

This permit, API Well Number: 47-8704757, issued to HG ENERGY, LLC, 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 all 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: J.H. STARR 117
Farm Name: FISHER, FREDDIE ET AL
API Well Number: 47-8704757
Permit Type: Secondary Recovery Well
Date Issued: 02/27/2015

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.

FORM WW-3 (B)
1/12



1) Date: 01/19/2015
2) Operator's Well No. JH Starr 117
3) API Well No.: 47 - Roane -
State County Permit
4) UIC Permit No. UIC2R08704AP

STATE OF WEST VIRGINIA
NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

5) WELL TYPE: Liquid Injection / Gas Injection (not storage) / Waste Disposal
6) LOCATION: Elevation: 1064' / Watershed: Laurel Fork
District: Smithfield / County Roane / Quadrangle Looneyville 7.5'
7) WELL OPERATOR: HG Energy, LLC / 8) DESIGNATED AGENT: Diane White
Address: 5260 Dupont Road / Address: 5260 Dupont Road
Parkersburg, WV 26101 / Parkersburg, WV 26101
9) OIL & GAS INSPECTOR TO BE NOTIFIED / 10) DRILLING CONTRACTOR
Name: Ed Gainer / Name: To Be Determined Upon Approval of Permit
Address: P. O. Box 821 / Address:
Spencer, WV 26201

11) PROPOSED WELL WORK
Drill / Drill deeper / Redrill / Stimulate
Plug off old formation / Perforate new formation / Convert
Other physical change in well (specify)

12) GEOLOGIC TARGET FORMATION Big Injun / Depth 2115 Feet (top) to 2135 Feet (bottom)
13) Estimated Depth of Completed Well, (or actual depth of existing well): 2215 TVD, 2740 TMD Feet

14) Approximate water strata depths: Fresh 380 Feet / Salt 1605 Feet
15) Approximate coal seam depths: NA

16) Is coal being mined in the area? Yes No / Source Estimated

17) Virgin reservoir pressure in target formation 1250 psig / Bottom hole pressure 2400 psi (BHFP)
18) Estimated reservoir fracture pressure 2650

19) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour 25 BBL / Bottom hole pressure 2400 psi
20) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES Fresh water, produced
water, bactericides and other chemicals as needed to maintain water quality and improve oil recovery.

21) FILTERS (IF ANY) Cartridge filters and/or coal bed filters
22) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL

23) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For Drilling	Left In Well		
Conductor									Kinds
Fresh Water	7"	LS ST&C	17#			500'	500'	CTS	Sizes
Coal									2.375" x 4.5"
Intermediate									Depths set
Production	4 1/2"	J-55	10.5#			2720'	2720'	200 sks	2400'
Tubing	2 3/8"	J-55	4.6#			2500'	2500'		Perforations
Liners									Top Bottom

24) APPLICANT'S OPERATING RIGHTS were acquired from JH Starr / dated 10/22/1906 of record in the
by deed / lease / other contract / dated / lease Book 10 Page 210
Roane County Clerk's office in

[Handwritten Signature]
1/20/15

Received
Office of Oil & Gas
JAN 22 2015

02/27/2015

87047575
CK 2917
\$ 6050⁰⁰

FORM WW-3 (A)
1/12



1) Date: January 19, 2015
2) Operator's Well No. JH Starr 117
3) API Well No.: 47 - -
State County Permit
4) UIC Permit No. UIC2R08704AP

STATE OF WEST VIRGINIA
NOTICE OF LIQUID INJECTION OF WASTE DISPOSAL WELL WORK PERMIT APPLICATION
FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS,

5) Surface Owner(S) To Be Served
(a) Name Freddie Fisher ✓
Address 4513 Clay Road
Spencer, WV 25276
(b) Name James Shamblin ✓
Address 4292 Clay Road
Spencer, WV 25276
(c) Name _____
Address _____
6) Inspector Ed Gainer
Address P. O. Box 821
Spencer, WV 25276
Telephone 304-389-7582
7) (a) Coal Operator
Name _____
Address _____
7) (b) Coal Owner(S) With Declaration Of Record
Name _____
Address _____
7) (c) Coal Lessee with Declaration Of Record
Name _____
Address _____

TO THE PERSONS NAMED ABOVE: You should have received this form and the following documents
(1) The Application For A Liquid Injection or Waste Disposal Well Work Permit on Form WW-3(B), which sets out the parties involved in the drilling or other work;
(2) The plat (surveyor's map) showing the well location on Form WW-6; and
(3) The Construction and Reclamation Plan on Form WW-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

The date proposed for the first injection or waste disposal is _____ 20 15 .

THE REASON YOU HAVE RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION [(FORM WW-3(B)) DESIGNATED TO YOU. HOWEVER YOU ARE NOT REQUIRED TO TAKE ACTION AT ALL.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to a well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of the mailing or delivery to the Chief.

The person signing this document shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document 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 HG Energy, LLC
Address 5260 Dupont Road
Parkersburg, WV 26101
By: Diane White
Its: Agent
Signature: Diane White

Received
Office of Oil & Gas
JAN 22 2015

02/27/2015

7013 2630 0001 9028 9294

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

SE

For delivery information visit our website at www.usps.com

SPENCER WV 25276

OFFICIAL USE

Postage	\$	\$1.40
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$7.40

0777
 13
 Postmark
 Here
 01/20/2015
 JHS 117

Sent To
 Freddie ~~Sta~~ Fisher ✓
 Street, Apt. No.;
 or PO Box No. 4513 Clay Road
 City, State, ZIP+4 Spencer WV 25276
 PS Form 3800, August 2006 See Reverse for Instructions

7013 2630 0001 9028 9362

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com

SPENCER WV 25276

OFFICIAL USE

Postage	\$	\$1.61
Certified Fee		\$3.30
Return Receipt Fee (Endorsement Required)		\$2.70
Restricted Delivery Fee (Endorsement Required)		\$0.00
Total Postage & Fees	\$	\$7.61

0777
 13
 Postmark
 Here
 01/20/2015
 JHS117

Sent To
 James Shamblin ✓
 Street, Apt. No.;
 or PO Box No. 4292 Clay Road
 City, State, ZIP+4 Spencer WV 25276
 PS Form 3800, August 2006 See Reverse for Instructions

WW-2B1
(5-12)

Well No. J. H. Starr 117

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 contactor chosen to collect sample.

Certified Laboratory Name Sturm Environmental
Sampling Contractor Sturm Environmental

Well Operator HG Energy, LLC
Address 5260 Dupont Road
Parkersburg, WV 26101
Telephone 304-420-1119

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.

Surface Owners With Water Sources Identified for Analysis/Sampling

* Freddie Fisher
4513 Clay Road
Spencer WV 25276

* Caroline Miller
4326 Clay Road
Spencer WV 25276

* James Shamblin
4292 Clay Road
Spencer WV 25276

Received
Office of Oil & Gas

JAN 22 2015

02/27/2015

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name HG Energy, LLC OP Code 494497948

Watershed Laurel Fork Quadrangle Looneyville 7.5'

Elevation 1064' County Roane District Smithfield

Description of anticipated Pit Waste: Fluids encountered while stimulating subject well

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

Will a synthetic liner be used in the pit? Yes If so, what mil.? 20 mil

Proposed Disposal Method For Treated Pit Wastes:
 Land Application
 Underground Injection (UIC Permit Number 25-561)
____ Reuse (at API Number _____)
____ Off Site Disposal (Supply form WW-9 for disposal location)
____ Other (Explain _____)

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Air, Fresh Water
-If oil based, what type? Synthetic, petroleum, etc. NA

Additives to be used? Water, Soap, KCl

Will closed loop system be used? No

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Leave in pit
-If left in pit and plan to solidify what medium will be used? Cement, lime, sawdust Native soil, cement, lime
-Landfill or offsite name/permit number? _____

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, 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 Diane White

Company Official (Typed Name) Diane White

Company Official Title Agent

Received
Office of Oil & Gas
JAN 22 2015

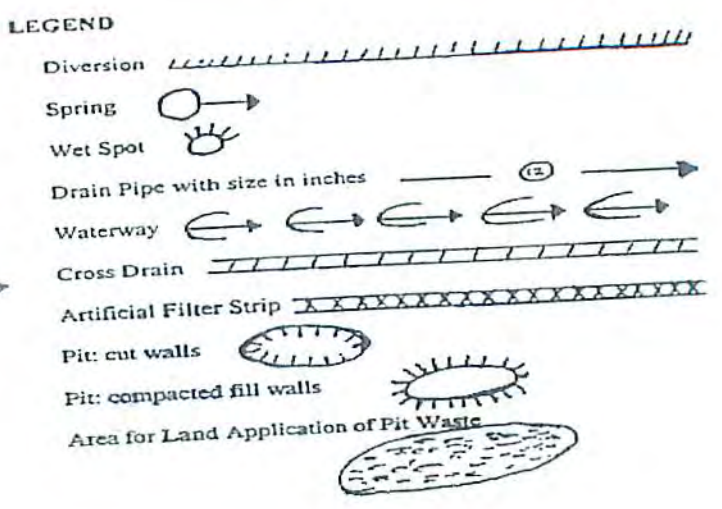
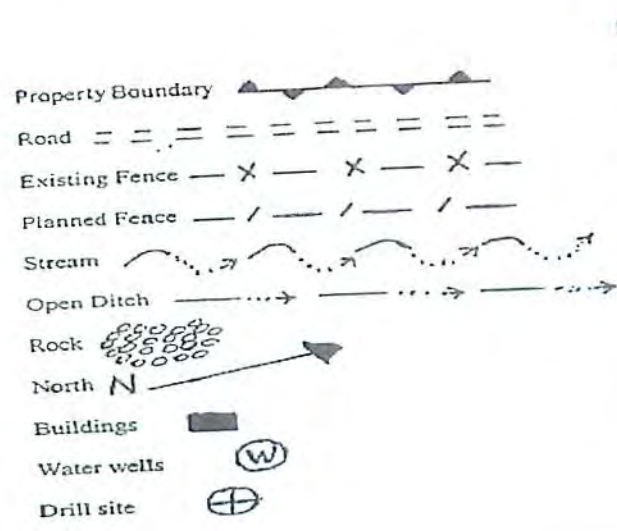
Subscribed and sworn before me this 19th day of January, 2015

Dianne Dulaney
My commission expires Oct. 4, 2016





02/27/2015



Proposed Revegetation Treatment: Acres Disturbed 1.8 Prevegetation pH _____
 Lime 3 Tons/acre or to correct to pH 6.5
 Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum)
 Mulch Straw 2 Tons/acre
 Seed Mixtures

Seed Type	Area I lbs/acre	Seed Type	Area II lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

Proper sediment control should be in place at all times.

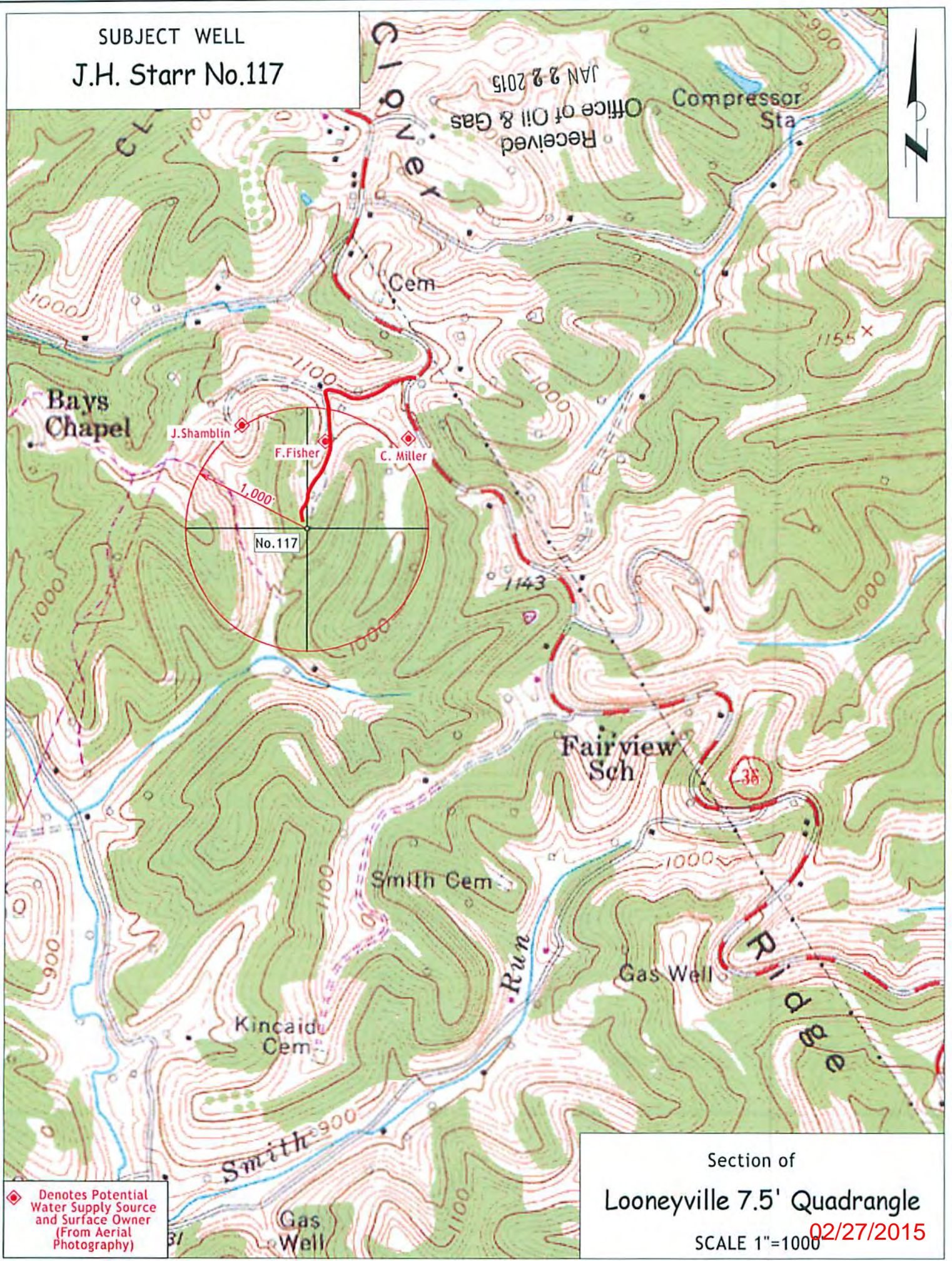
Attach:
Drawing(s) of road, location, pit and proposed area for land application.
Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:

Received
Office of Oil & Gas
JAN 22 2015

Title: Inspector Date: 1/20/15
Field Reviewed? Yes No

SUBJECT WELL
J.H. Starr No.117



◆ Denotes Potential Water Supply Source and Surface Owner (From Aerial Photography)

Section of
Looneyville 7.5' Quadrangle
SCALE 1"=1000
02/27/2015

(BOT. HL: LON:-81°17'22.5")

LON: -81°17'16.3"

10805'

LAT: 38°45'00"

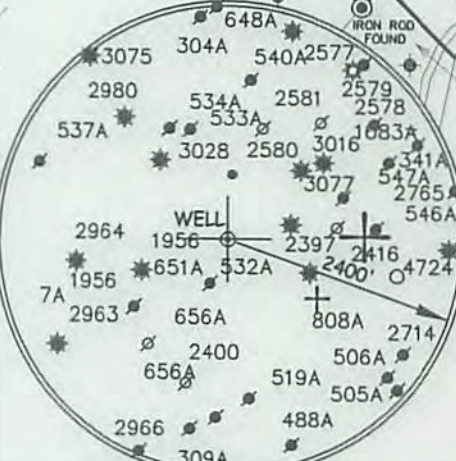
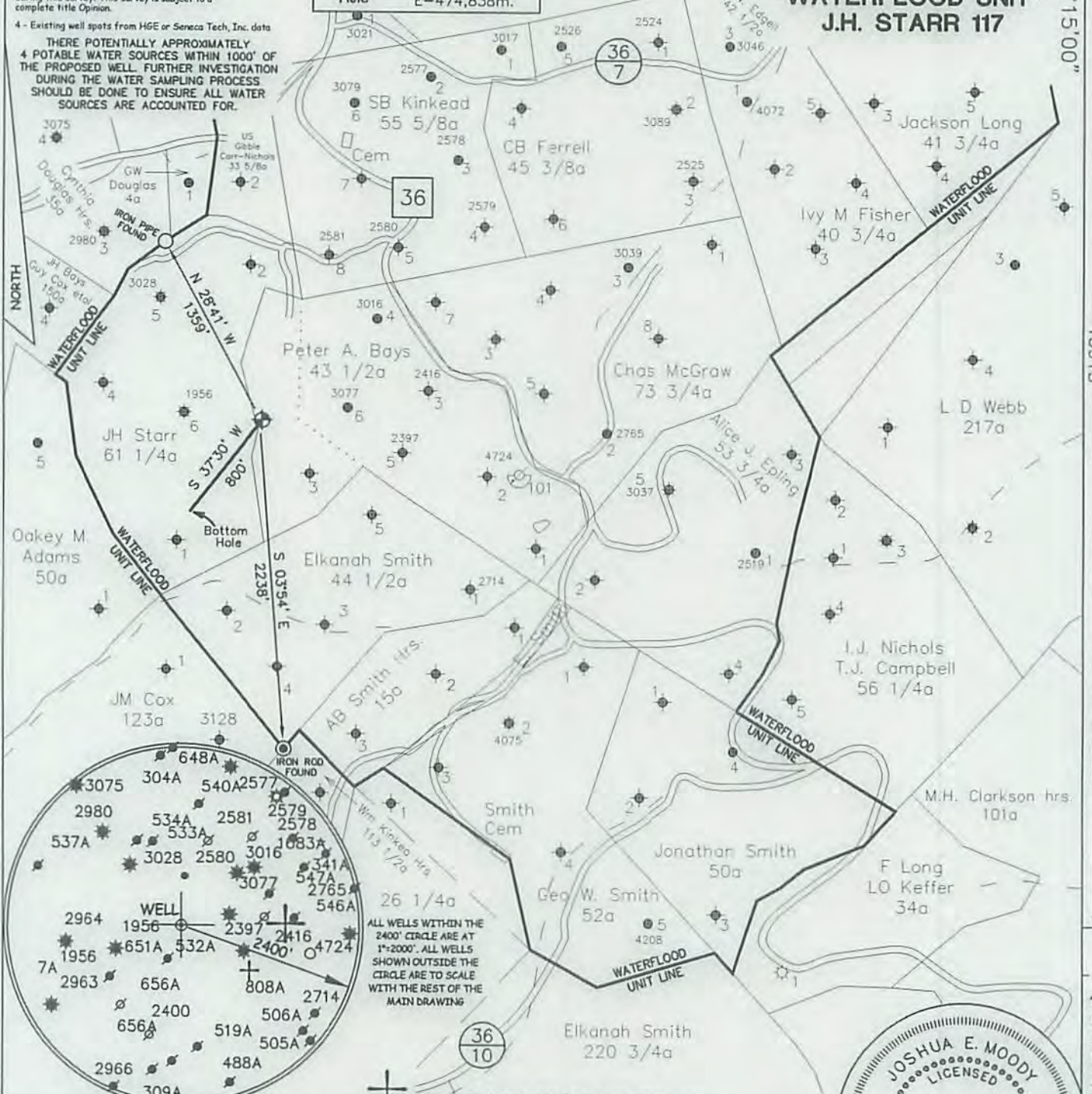
MAP OF H.G. ENERGY, LLC -WATERFLOOD UNIT- J.H. STARR 117

LON: 81°15'00"

- SURVEY NOTES**
- 1 - Well ties and Latitude and Longitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1927).
 - 2 - Surface owners and adjoining information obtained from the Roane County Assessor's tax records.
 - 3 - No Title Opinion was provided to the Surveyor during this survey. This survey is subject to a complete title opinion.
 - 4 - Existing well spots from HGE or Seneca Tech, Inc. data
- THERE POTENTIALLY APPROXIMATELY 4 POTABLE WATER SOURCES WITHIN 1000' OF THE PROPOSED WELL. FURTHER INVESTIGATION DURING THE WATER SAMPLING PROCESS SHOULD BE DONE TO ENSURE ALL WATER SOURCES ARE ACCOUNTED FOR.

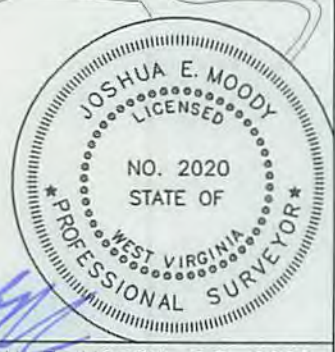
UTM Coordinates (Zone 17N-NAD 1983)	
Surface	N-4,284,844m. E-474,986m.
Bottom Hole	N-4,284,651m. E-474,838m.

LOCATION REFERENCES	
MAGNETIC BEARING	
5 66° W 121.7'	14" RED OAK
N 31° W 153.6'	14" BLACK OAK



ALL WELLS WITHIN THE 2400' CIRCLE ARE AT 1"=2000'. ALL WELLS SHOWN OUTSIDE THE CIRCLE ARE TO SCALE WITH THE REST OF THE MAIN DRAWING

⊕ DENOTES LOCATION OF WELL ON U.S. TOPO MAPS.



JOB # 14-033
DRAWING # 14CLOVER FOLDER
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEV. MAPPING GRADE GPS

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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



**WEST VIRGINIA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,
OFFICE OF OIL AND GAS**
MOODY LAND SURVEYING, LLC
ST. MARYS, WV 26170

JOSHUA E. MOODY, P.S. 2020
DATE 12/15/14
OPERATOR'S WELL
J.H. STARR # 117

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL HORIZONTAL
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 1064' WATERSHED LAUREL FORK API WELL # 47-087-047575
DISTRICT SMITHFIELD COUNTY ROANE STATE COUNTY PERMIT
QUADRANGLE LOONEYVILLE 7.5'

SURFACE OWNER FREDDIE FISHER ET AL ACREAGE 33.00 ACRES +/-
OIL & GAS ROYALTY OWNER WILLIAM S. HAYMOND II ET AL LEASE ACREAGE 104.00 ACRES +/-
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WELL WILL BE DRILLED DIRECTIONALLY (S 37°30' W 800')
PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION BIG INJUN ESTIMATED DEPTH TVD=2,215' MD=2,740'
WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT DIANE WHITE
ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

02/27/2015

13915'
LAT: 38°42'42.5"
(BOTTOM HOLE: LAT: 38°42'36.2")

FORM MW-9

LEASE # 81281-20

ADDRESS BARBERSBURG, MD 21011
 ADDRESS 2500 DUBOIS ROAD
 WELL OPERATOR H.C. ENERGY, LLC
 TARGET FORMATION BIG HUMP
 TYPE & ABANDON STEAM OIL & WATER
 OTHER ANALYSIS CHANGE IN WELL (SPECIFY) WELL WILL BE DRILLED DIRECTIONALLY (2 21.30, W 800),
 STIMULATE X TYPE OF OLD FORMATION BEFORE/ATE NEW FORMATION
 PROPOSED WORK: DRILL X COMPLET DRILL DEEPER BEDRIFT FRACTURE OR
 OIL & GAS BOYALTY OWNER MIGLIAM S. HAYMOND II ET AL LEASE ACRES 104.00 ACRES +/-
 SURFACE OWNER EBEDDIE FISHER ET AL ACRES 33.00 ACRES +/-

ADDRESS BARBERSBURG, MD 21011
 ADDRESS 2500 DUBOIS ROAD
 DESIGNATED AGEN DIANE WHITE
 ESTIMATED DEPTH 140=5'12", MD=3'140,

LOCATION: ELEVATION 1094, WATERSHED TWP/REG WORK STATE MD COUNTY STLO PERMIT 21281
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW BY WELL # 21281
 WELL TYPE: OIL GAS FLUID INJECTION X WASTE DISPOSAL HORIZONTAL

OFFICE OF OIL AND GAS
 OF ENVIRONMENTAL PROTECTION
 WEST VIRGINIA DEPARTMENT



21. WABRS, MD 21010
 WOODY LAND SURVEYING, LLC

OFFICE OF OIL AND GAS
 OF ENVIRONMENTAL PROTECTION
 WEST VIRGINIA DEPARTMENT

W.H. STARR # 111
 OPERATOR, 2 WELL
 DATE 12/12/14
 JOSEPH E. WOODY, P.E. 3030

MAPPING SCALE CBS
 PROVEN SOURCE OF ELEV.
 ACCURACY 1/300
 MINIMUM DEGREE OF
 SCALE 1" = 1000'
 DRAWING # 14CGOLEV E06B
 JOB # 14-032

THE DEPARTMENT OF ENVIRONMENTAL PROTECTION
 REQUIRES BY LAW AND THE REGULATIONS ISSUED AND DESCRIBED BY
 THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION
 I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO
 REFLECT LOCATION OF WELL ON US TOPO MAPS



SOURCES ARE ACCUMULATED FOR
 SHOULD BE DONE TO ENSURE ALL WATER
 DURING THE WATER DRILLING PROCESS
 THE PROPOSED WELL. FURTHER INVESTIGATION
 + POTENTIAL WATER SOURCES WITHIN 1000' OF
 THESE POTENTIALLY APPROPRIATELY

NOTES SURVEY
 1 - New digital and aerial data was used
 2 - Elevation points were taken from
 3 - Elevation points were taken from
 4 - Elevation points were taken from
 5 - Elevation points were taken from

LOCATION REFERENCE	131. W 123. N. BLACK OAK
	2 99. W 151. N. 74. RED OAK
	WAGNETIC BEARING
	2 99. W 151. N. 74. RED OAK
	2 99. W 151. N. 74. RED OAK

W.H. STARR III
 -WATERBLOOD UNIT-
 H.C. ENERGY, LLC
 MAP OF
 00' 24.38" TA

(VOL. 11: 81.11.18.3) (VOL. 11: 81.11.18.3) (VOL. 11: 81.11.18.3) (VOL. 11: 81.11.18.3)