



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

August 29, 2013

WELL WORK PERMIT
Secondary Recovery Well

This permit, API Well Number: 47-3305778, 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: A. STONESTREET 124
Farm Name: CURRY, KEITH A. & BRENDA S.
API Well Number: 47-3305778
Permit Type: Secondary Recovery Well
Date Issued: 08/29/2013

Promoting a healthy environment.

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 within 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.

33057783

Form WW-9
Rev. 10/94

Page 3 of 3
API Number 47- 033

Operator's Well No. A Stonestreet No. 124

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 HG Energy, LLC OP Code 494497948

Watershed Ten Mile Creek Quadrangle Wolf Summit 7.5' 692

Elevation 1228' County Harrison 33 District Tenmile 09

Description of anticipated Pit Waste: Fluids encountered in drilling shallow well.

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

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number)
- Reuse (at API Number)
- Off Site Disposal (Supply Form WW-9 for disposal location)
- Other (Explain)

SDW
6/27/2013

Drilling medium anticipated for this well? Air, fresh water, oil based, etc. Air, Fresh Water

- If oilbased, what type? Synthetic, petroleum, etc. NA

Additives to be used? Water, Soap, KCI

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 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 C White

Company Official (Typed Name) Diane C. White

Company Official Title Accountant

Subscribed and sworn before me this 20 day of June 2013

Tina L. Pethtel Notary Public

Received
Office of Oil & Gas

My commission expires Nov. 12, 2018

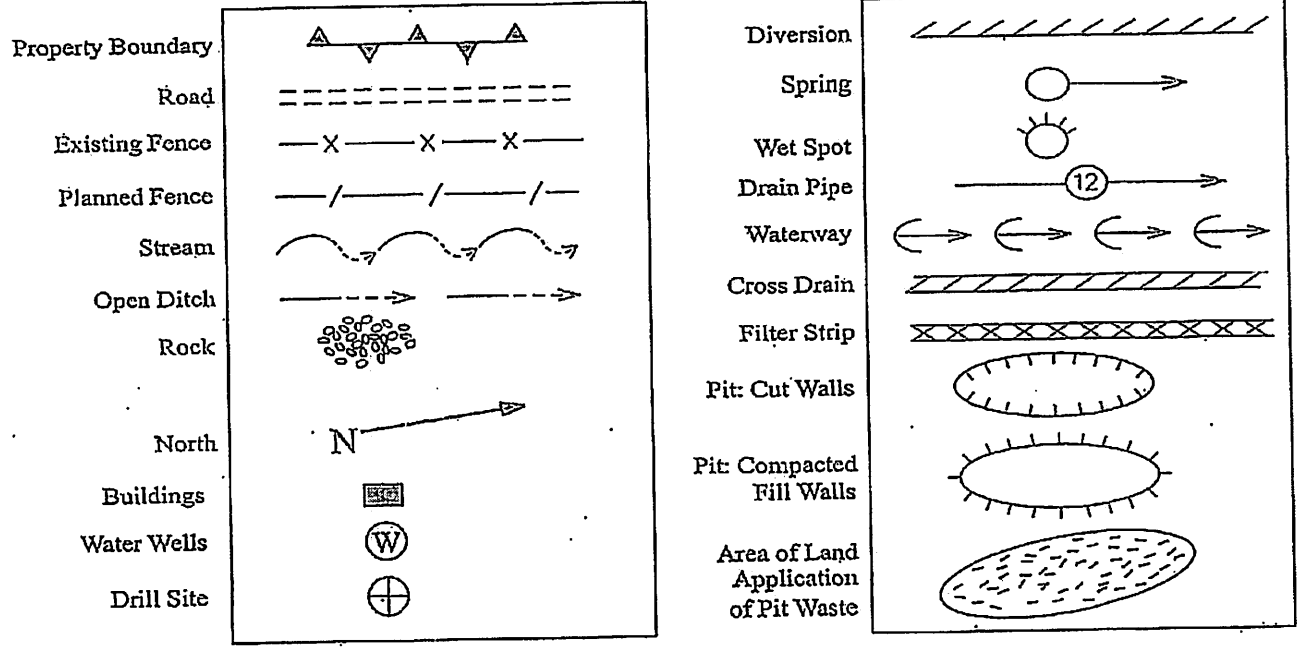
Form WW-9



JUL 1 2013

WAWO-Back

Legend



Proposed Revegetation Treatment: Acres Disturbed Area I Approx. 1.5 Ac. Prevegetation pH _____
Area II Approx. 1.0 Ac.
 Lime 2 Tons/Acre or Correct to pH 6.5
 Fertilizer (10-20-20 or Equivalent) 500 Lbs./Acre (500 lbs. Minimum)
 Mulch Straw 2 Tons/Acre

SEED MIXTURES

<u>Area I (Location)</u>		<u>Area II (Road)</u>	
Seed Type	Lbs./Ac.	Seed Type	Lbs./Ac.
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

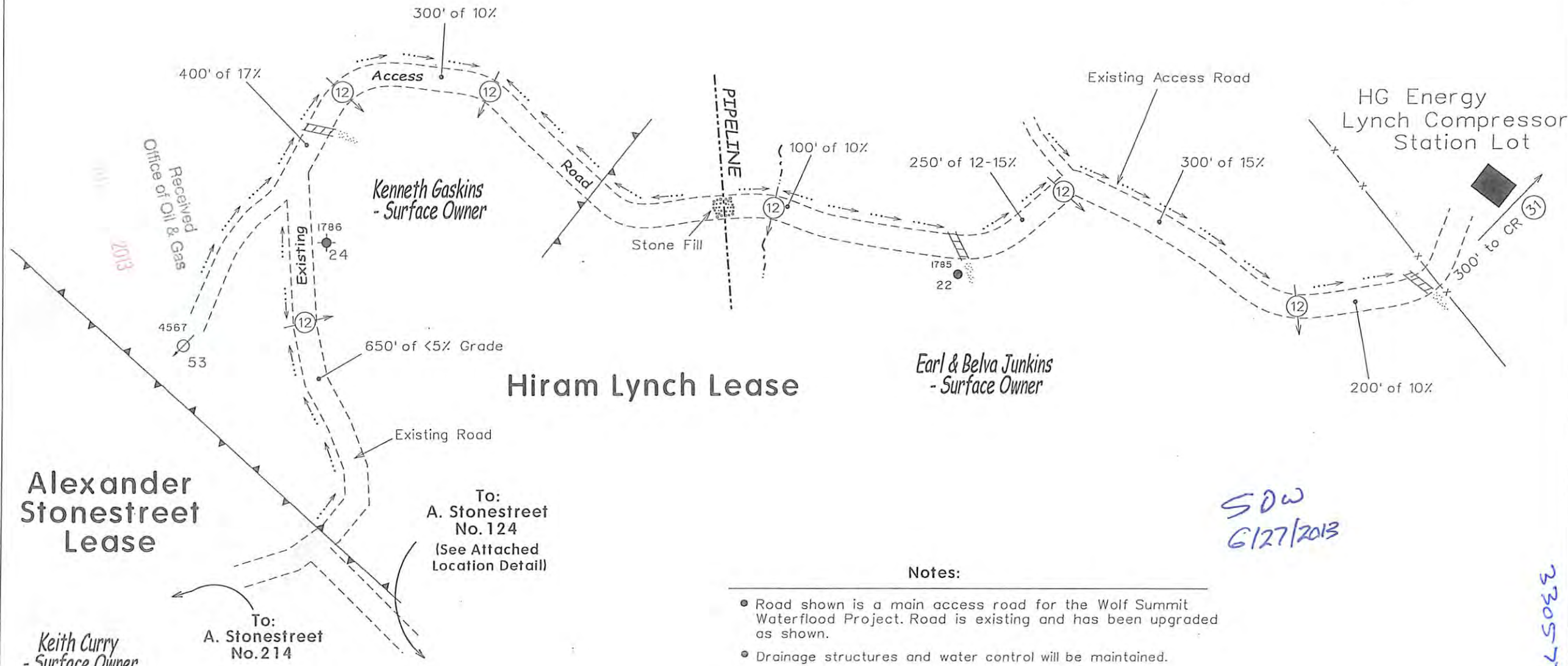
Attach:
 Drawing(s) of road, location, pit and proposed area for land application
 Photocopied section of involved 7.5' topographic sheet.

Plan approved by: S. D. Warratt
 Comments: _____

Title: Oilt Gas Inspector Date: 6/27/2013

Field Reviewed? (X) Yes () No

Detail of: Main Waterflood Access Road To Serve Alexander Stonestreet No. 124



Alexander Stonestreet Lease

Keith Curry - Surface Owner

Kenneth Gaskins - Surface Owner

Hiram Lynch Lease

Earl & Belva Junkins - Surface Owner

HG Energy Lynch Compressor Station Lot

To:
A. Stonestreet No. 124
(See Attached Location Detail)

To:
A. Stonestreet No. 214

Notes:

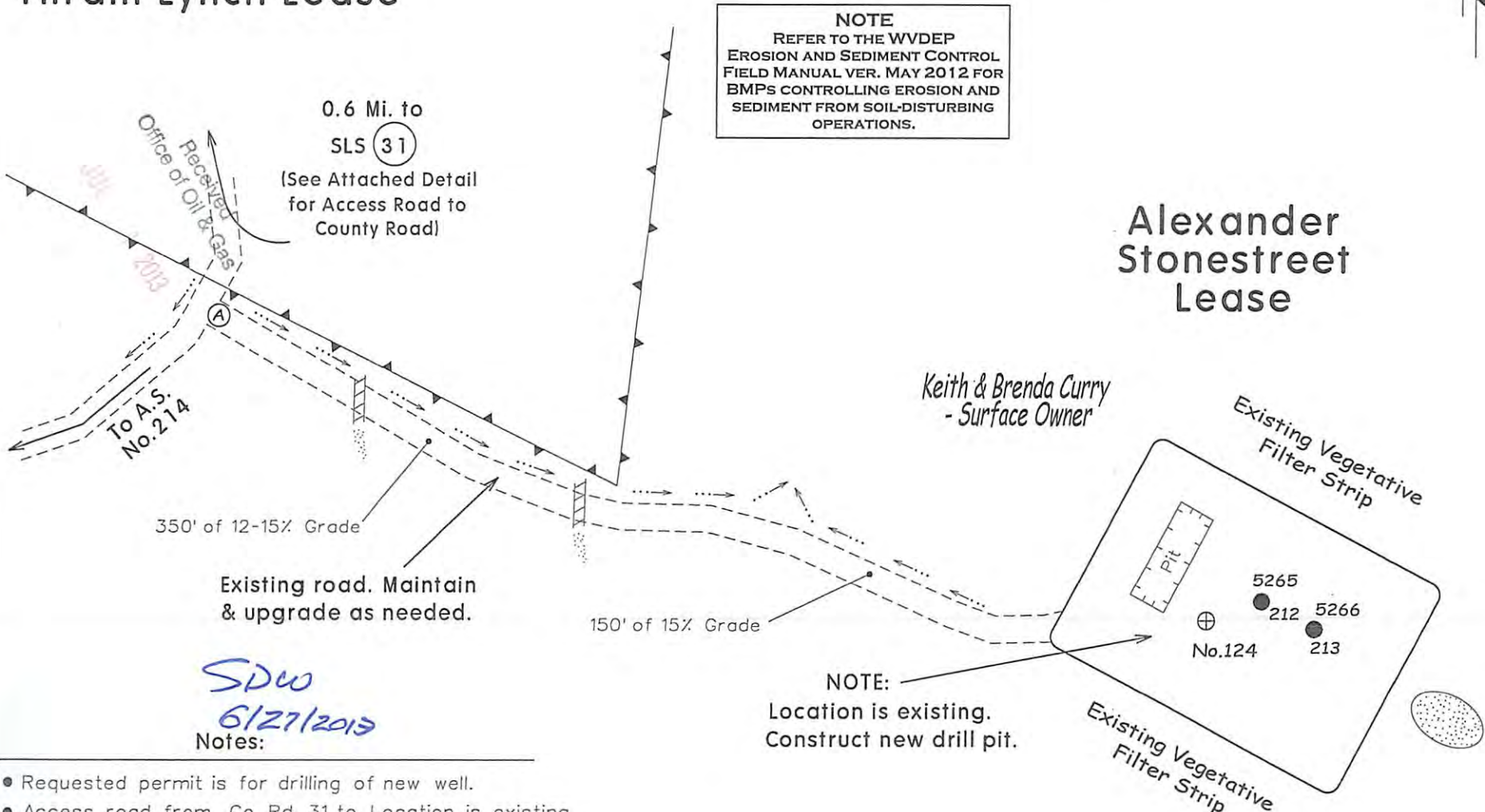
- Road shown is a main access road for the Wolf Summit Waterflood Project. Road is existing and has been upgraded as shown.
- Drainage structures and water control will be maintained.
- Any disturbed areas will be re-vegetated as outlined on Form WW-9.
- All road grades <5% except as noted.

Note: Drawing not to Scale

33057785

Reclamation Plan For: Alexander Stonestreet No. 124

Hiram Lynch Lease



NOTE
REFER TO THE WVDEP
EROSION AND SEDIMENT CONTROL
FIELD MANUAL VER. MAY 2012 FOR
BMPs CONTROLLING EROSION AND
SEDIMENT FROM SOIL-DISTURBING
OPERATIONS.

Alexander Stonestreet Lease

*Keith & Brenda Curry
- Surface Owner*

350' of 12-15% Grade

Existing road. Maintain
& upgrade as needed.

150' of 15% Grade

NOTE:
Location is existing.
Construct new drill pit.

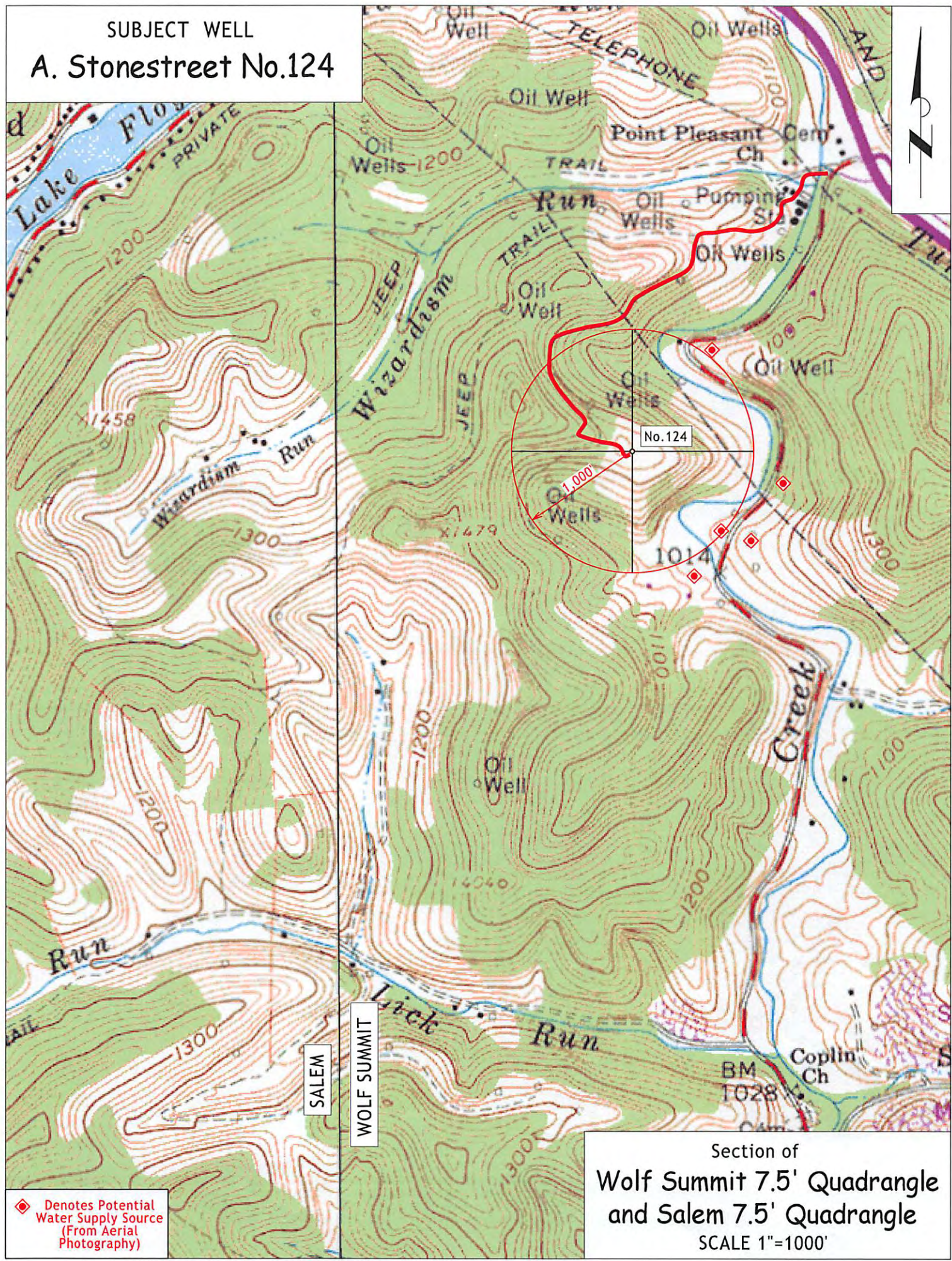
SDW
6/27/2013
Notes:

- Requested permit is for drilling of new well.
- Access road from Co. Rd. 31 to Location is existing. Structures will be maintained.
- All disturbed areas will be re-vegetated as outlined on Form WW-9.
- Maintain sediment barriers and drainage structures.
- All road grades <5% except as noted.
- Location of drill pit may be changed based on as-built considerations.

Note: Drawing not to Scale

33057785

SUBJECT WELL
A. Stonestreet No.124



◆ Denotes Potential Water Supply Source (From Aerial Photography)

Section of
Wolf Summit 7.5' Quadrangle
and Salem 7.5' Quadrangle
SCALE 1"=1000'

(BOT. HL: LON:-80°29'29.1")

LON:-80°29'28.6"

9325

SURVEY NOTES

1 - Well ties and Latitude and Longitude were measured by Topcon HiPer GA survey grade GPS. Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1927).

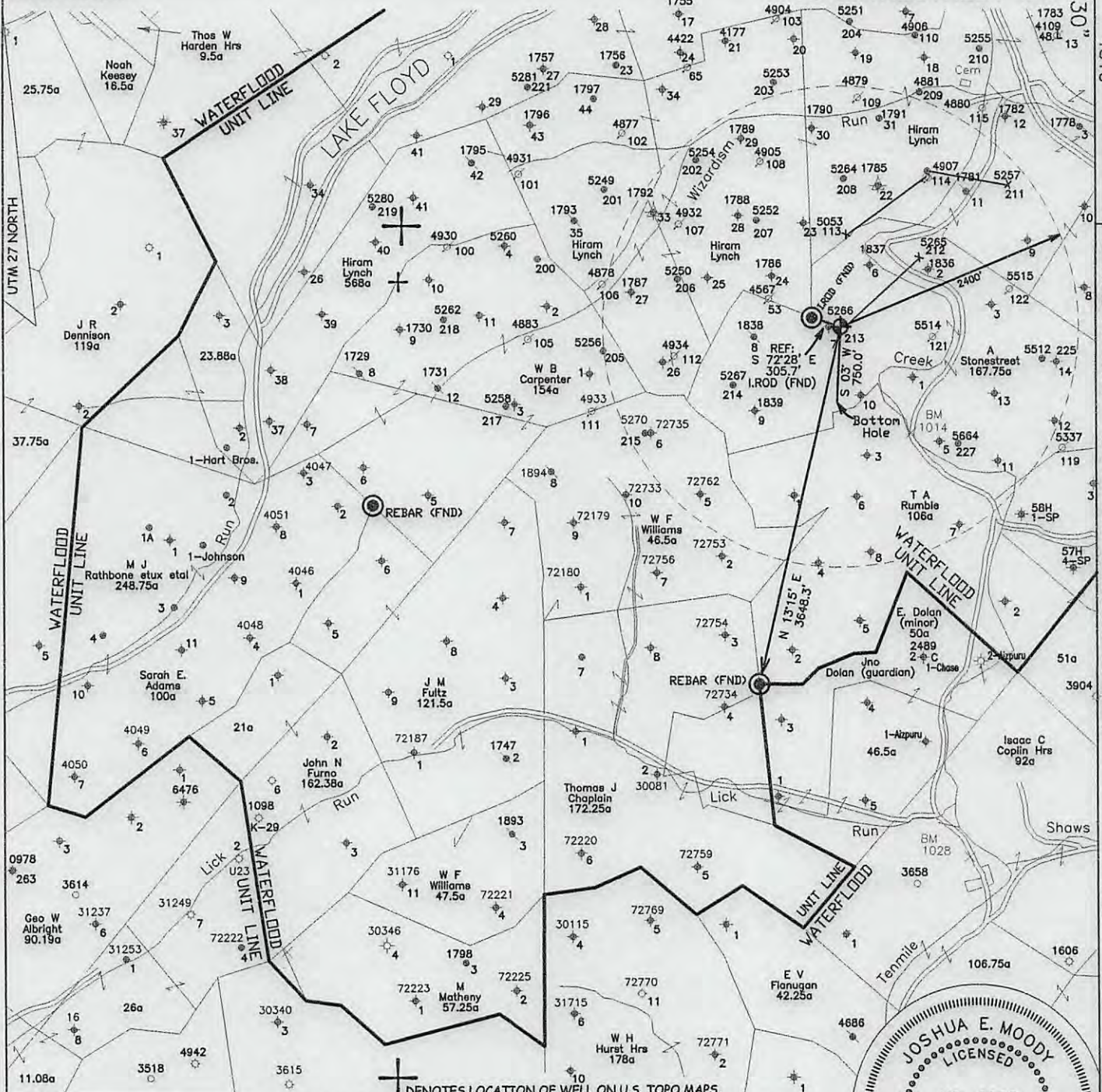
2 - Surface owners, adjoiners information, Lease names, & line mapping obtained from HGE GIS system.

3 - No Title Opinion was provided to the Surveyor during this survey. This survey is subject to a complete title Opinion.

UTM Coordinates (Zone 17N-NAD 1983)		LOCATION REFERENCES
Surface	N-4,347,811m. E-543,894m.	UTM 27 S 85°56' E 48.1' EX: WELL N 55°06' E 31.9' EX: WELL
Bottom Hole	N-4,347,583m. E-543,882m.	Brg. Direction is prop. well to the ref.

LAT: 39°17'30"
MAP OF
H.G. ENERGY, LLC
-WATERFLOOD UNIT-
A. STONESTREET 124

LON: 80°27'30"
 4810
 LAT: 39°16'42.4"
 (BOTTOM HOLE: LAT: 39°16'35.0")



JOB # 13-014
 DRAWING # 13LAKEFLOYD FOLDER
 SCALE 1" = 1500'
 MINIMUM DEGREE OF ACCURACY 1/2500
 PROVEN SOURCE OF ELEV. BENCH MARK H-80

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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 5/15/13
 OPERATOR'S WELL A. STONESTREET # 124

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 1228' WATERSHED TEN MILE CREEK API WELL # 057789
 DISTRICT TEN MILE COUNTY HARRISON STATE 47 COUNTY 033 PERMIT 057789
 QUADRANGLE WOLF SUMMIT 7.5'
 SURFACE OWNER KIETH A. & BRENDA S. CURRY ACREAGE 99.60 ACRES +/-
 OIL & GAS ROYALTY OWNER WAYNE ENGLAND ET AL LEASE ACREAGE 182 ACRES +/-
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WILL BE DRILLED DIRECTIONALLY (S 3° W 750')
 PLUG & ABANDON CLEAN OUT & REPLUG
 TARGET FORMATION 5TH SAND ESTIMATED DEPTH MD= 3,200'
 WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT MIKE KIRSCH
 ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

COUNTY NAME PERMIT

33057785

(BOT. HL: LON:-80°29'29.1")

LON:-80°29'28.6"

9325

LON: 80°27'30"

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LAT: 39°16'42.4"

(BOTTOM HOLE: LAT:39°16'35.0")

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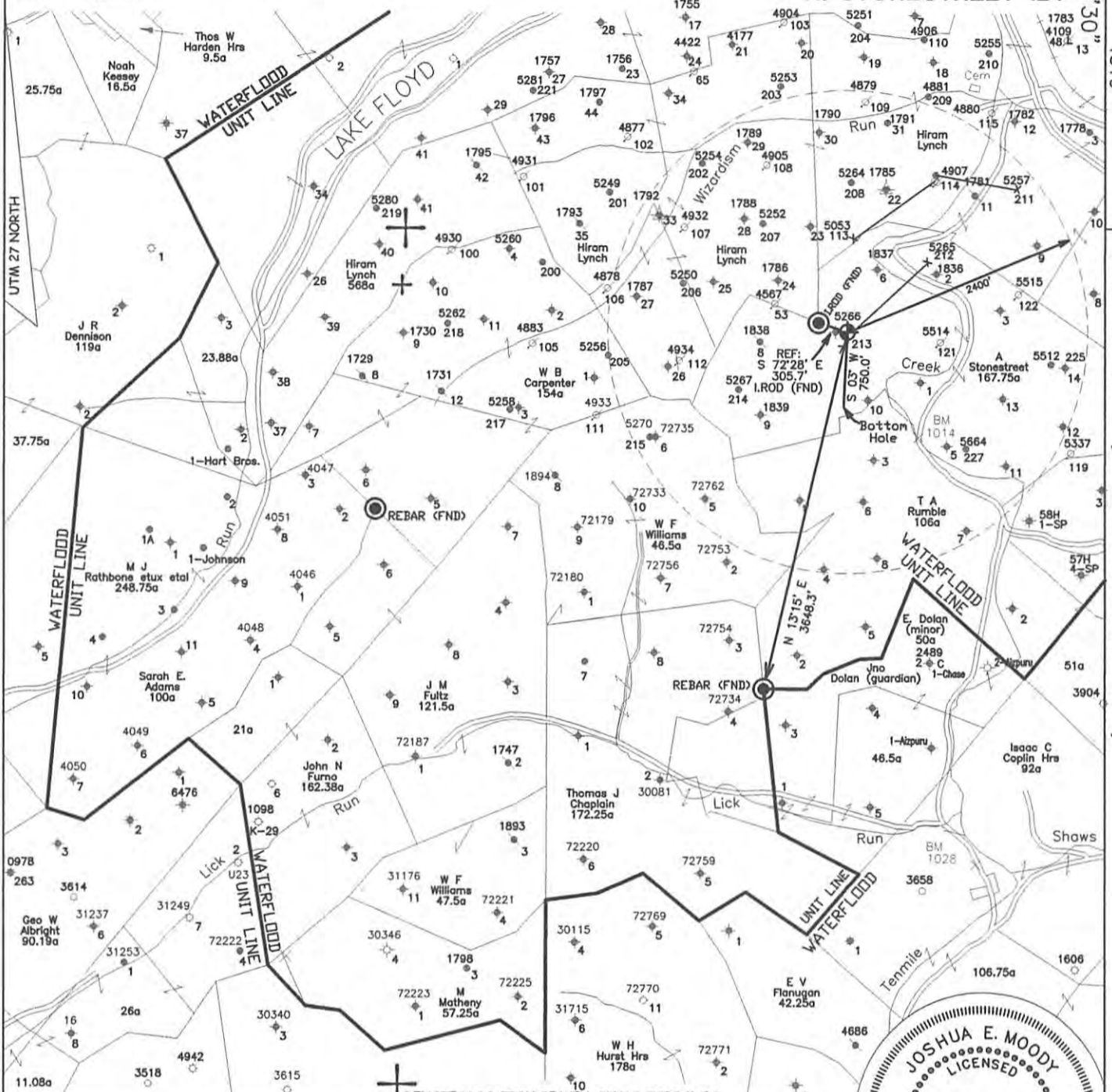
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		UTM 27	
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LAT: 39°17'30"

**MAP OF
H.G. ENERGY, LLC
-WATERFLOOD UNIT-
A. STONESTREET 124**



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

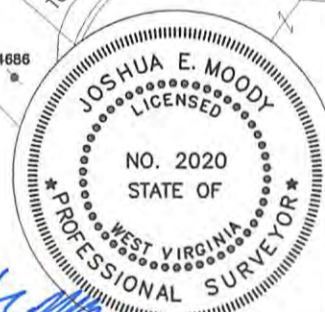
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WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

MOODY LAND SURVEYING, LLC
 ST. MARYS, WV 26170



JOSHUA E. MOODY, P.S. 2020

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 DISTRICT TEN MILE COUNTY HARRISON STATE WV COUNTY PERMIT
 QUADRANGLE WOLF SUMMIT 7.5'

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