



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

December 05, 2013

WELL WORK PERMIT

Re-Work

This permit, API Well Number: 47-1704809, issued to DEEM, J. F. OIL & GAS, 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: MARY WALTON NO. 6
Farm Name: COASTAL TIMBERLANDS CO.
API Well Number: 47-1704809
Permit Type: Re-Work
Date Issued: 12/05/2013

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.
8. If well work related activities require the use of water obtained by withdrawals from waters of this state in amounts that exceed two hundred ten thousand gallons during any thirty day period, the operator is required to consult, and adhere to, the guidance provided by DEP's Water Withdrawal Guidance Tool prior to any water withdrawals.

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

1) Well Operator: J. F. Deem Oil & Gas, LLC

307118	Doddridge	New Milton	New Milton 7.5'
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Operator ID County District Quadrangle

2) Operator's Well Number: Walton No. 6 3) Elevation: 1,203

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

5) Proposed Target Formation(s): Injun Proposed Target Depth: 2,231 - 2,260

6) Proposed Total Depth: 2,380 Feet Formation at Proposed Total Depth: Injun

7) Approximate fresh water strata depths: 80'

8) Approximate salt water depths: None

9) Approximate coal seam depths: None

10) Approximate void depths, (coal, Karst, other): None listed in offset well data or well record

11) Does land contain coal seams tributary to active mine? None

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)

Re-work well- Set Bridge plug at 2,380, Perf 4.5" at 2,376, cement through perf with 365 sacks of 50/50 POZM14,
Set Frac Plug at 2,370, Perf at 2,260 to 2,231, Stimulate zone with H2O and N2

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						
Fresh Water						
Coal						
Intermediate	8 5/8"				1236'	
Production	4.5"	J55			5589'	
Tubing						
Liners						

Packers: Kind: _____
 Sizes: _____ *JAW* OK
 Depths Set _____

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: Mary Walton Operator Well No.: Six (6)

LOCATION: Elevation: 1205' Quadrangle: New Milton

District: New Milton County: Doddridge

Latitude: 14,020 Feet South of 39 Deg. 15 Min. 00 Sec.

Longitude 2,820 Feet West of 80 Deg. 42 Min. 30 Sec.

Company: J. F. Deem Oil & Gas LLC

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>4541 Emerson Avenue, #1 Parkersburg, WV 26104</u>	<u>8-5/8</u>	<u>1236</u>	<u>1236</u>	<u>364 Cu Ft</u>
Agent: <u>Frank Deem</u>	<u>4-1/2</u>		<u>5589</u>	<u>619 Cu Ft</u>
Inspector: <u>Mike Underwood</u>				
Date Permit Issued: <u>03-22-04</u>				
Date Well Work Commenced: <u>01-18-05</u>				
Date Well Work Completed: <u>01-30-05</u>				
Verbal Plugging:				
Date Permission granted on:				
<u>Rotary</u> xx <u>Cable</u> <u>Rig</u>				
Total Depth (feet): <u>5637</u>				
Fresh Water Depth (ft.): <u>80</u>				
Salt Water Depth (ft.): <u>NR</u>				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>None</u>				

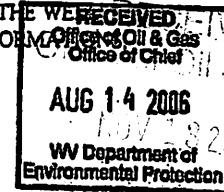
OPEN FLOW DATA Alexander 5370-5483
Benson 5109-5117
 Producing formation Riley Pay zone depth (ft) 4653-5025
 Gas: Initial open flow 10 MCF/d Oil: Initial open flow 0 Bbl/d
 Final open flow 750 MCF/d Final open flow Show Bbl/d
 Time of open flow between initial and final tests 8 Days ~~Hours~~
 Static rock Pressure 1520 psig (surface pressure) after 48 Hours

Balltown 3941-4345
 Second producing formation Warren Pay zone depth (ft) 3504-3591
 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

*All Formations Co-Mingled.

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS ENCOUNTERED BY THE WELLBORE.

Signed: Frank Deem
 By: Owner
 Date: Aug 8, 2006



WV Department of Environmental Protection

New Milton 1

TREATMENT:

- Stage #1: Alexander: 5375-5482 (14 Holes) 500 GA, 60,000# 20/40 Sand & 818 Bbls.
60 Quality Foam
- Stage #2: Benson, 3rd & 2nd Riley: 4866-5112 (14 Holes) 750 GA, 30,000# 20/40 Sand &
529 Bbls. 60 Quality Foam
- Stage #3: Riley & Lower Balltown: 4200-4666 (14 Holes) 750 GA, 5,000# 80/100 Sand &
25,000# 20/40 Sand and 619 Bbls. 60 Quality Foam
- Stage #4: Warren: 3472-3944 (14 Holes) 750 GA, 5,000# 80/100 Sand & 40,000# 20/40 Sand
and 641 Bbls. 60 Quality Foam

FORMATIONS:

Sand & Shale	0	-	35	
Sand	35	-	130	Water @ 80'
Red Rock & Shale	130	-	235	
Sand	235	-	290	
Red Rock, Sand & Shale	290	-	593	
Sand	593	-	620	
Red Rock, Sand & Shale	620	-	1972	
Sand	1972	-	2010	
Sand & Shale	2010	-	2070	
Little Lime	2070	-	2110	
Sand	2110	-	2125	
Big Lime	2125	-		
Injun		-	2280	
Sand & Shale	2280	-	3480	
Warren	3480	-	3500	
Sand & Shale	3500	-	4173	
Sand	4173	-	4183	
Sand & Shale	4183	-	5110	
Benson	5110	-	5130	
Sand & Shale	5130	-	5370	
Alexander	5370	-	5400	
Sand & Shale	5400	-	5637	
RTD	5637			

RECEIVED
Office of Conservation
NOV 18 2013
WV Department of
Environmental Protection

1704809R

WW-2A
(Rev. 6-07)

1.) Date: _____
2.) Operator's Well Number Walton No. 6
State County Permit
3.) API Well No.: 47- 017 - 4809

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 Coastal Timberlands Company ✓ Address P.O. Box 709
Buckhannon, WV 26201
(b) Name _____ Address _____
(c) Name _____ Address _____
6) Inspector Douglas Newlon Address 4060 Dutchman Road
Macfarlan, WV 26148 Telephone 304-932-8049
5) (a) Coal Operator Name N/A 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:

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

OR
x 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)
- x 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 J.F. Deem Oil and Gas, LLC
By: Frank Deem ✓
Its: Designated Agent
Address 4541 Emerson Avenue #1 Floor 2
Parkersburg, WV 26104
Telephone 304-428-0005

Subscribed and sworn before me this 7th day of November, 2013

Melinda K. Johnson Notary Public
My Commission Expires July 9, 2017

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

1704809 R

WW-2A1
(Rev. 1/11)

Operator's Well Number Walton No. 6

**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
John Walton, et al	George Jackson	1/8	69/162
George Jackson	Ferrall Prior	W.I.	
Ferrell Prior	Waco Oil & Gas	W.I.	Bought rights thru bankruptcy
Waco Oil & Gas	Ashland	W.I.	
Ashland	J.F. Deem	W.I.	179/124-133 By Assignment

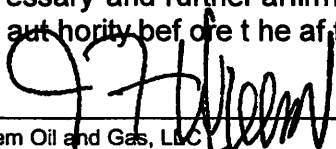
**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

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:

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

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:



 J.F. Deem Oil and Gas, LLC

 Frank Deem, Designated Agent

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name J.F. Deem Oil and Gas, LLC OP Code 307118

Watershed (HUC 10) Little Toms Fork Quadrangle New Milton 7.5'

Elevation 1,203 County Doddridge District New Milton

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

Will a pit be used for drill cuttings? Yes X No _____

If so, please describe anticipated pit waste: Flowback waste

Will a synthetic liner be used in the pit? Yes X No _____ If so, what ml.? 60

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 _____)

Will closed loop system be used? N/A

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. N/A

-If oil based, what type? Synthetic, petroleum, etc. _____

Additives to be used in drilling medium? N/A

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

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

-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 _____
Company Official (Typed Name) Frank Deem
Company Official Title Designated Agent

Subscribed and sworn before me this 7th day of November, 20 13

Melinda K. Johnson

My commission expires July 9, 2017

Notary Public

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Melinda K. Johnson
1139 - 48th. Street
Vienna, WV 26105
My Commission Expires July 9, 2017

1704809R

Form WW-9

Operator's Well No. Walton No. 6

LEGEND

- Property Boundary
- Road
- Existing Fence
- Planned Fence
- Stream
- Open Ditch
- Rock
- North
- Buildings
- Water wells
- Drill site

- Diversion
- Spring
- Wet Spot
- Drain Pipe with size in inches
- Waterway
- Cross Drain
- Artificial Filter Strip
- Pit: cut walls
- Pit: compacted fill walls
- Area for Land Application of Pit Waste

Proposed Revegetation Treatment: Acres Disturbed 3.75 +/- Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 1/3 TON lbs/acre (500 lbs minimum)

Mulch HAY 2 Tons/acre

Seed Mixtures

Seed Type	Area I	lbs/acre	Seed Type	Area II	lbs/acre
KY-31		40	ORCHARD GRASS		15
ALSIKE CLOVER		5	ALSIKE CLOVER		5
ANNUAL RYE		15			

Attach: Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

RECEIVED
Office
NOV 11 2013

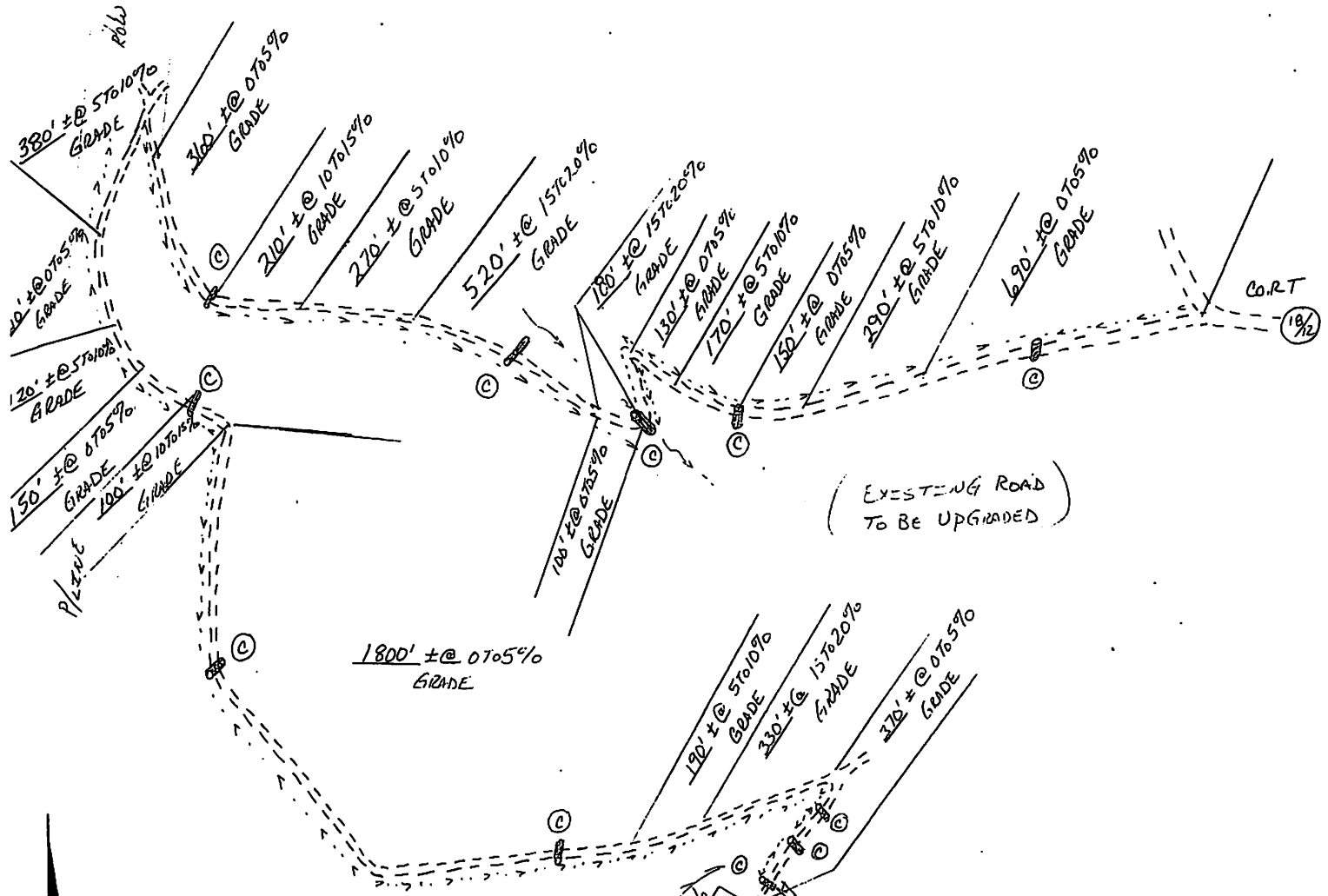
Plan Approved by: Douglas Newton Mr. Hoff

Comments: Reclaim seed & mulch

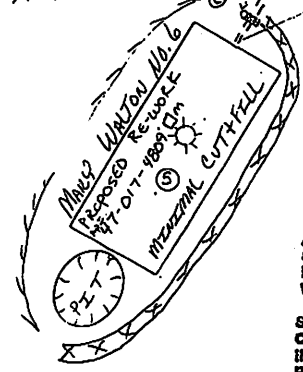
Title: Oil & Gas Inspector Date: 11-4-2013

Field Reviewed? () Yes (/) No

MARY WALTON LEASE WELL NO. 6



DRAWING
NOT TO
SCALE



NOTE: (C) = EXISTING CULVERT UNLESS OTHERWISE NOTED.
Office

ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.E.P. OIL AND GAS BMP MANUAL. ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.O.T. REGULATIONS. SEPARATE PERMITS MAY BE REQUIRED BY THE D.O.T.

SEDIMENT BASINS (TRAPS) AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE WV D.E.P. OIL AND GAS BMP MANUAL. FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFICATION TO THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

TEMPORARY SEED & MULCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

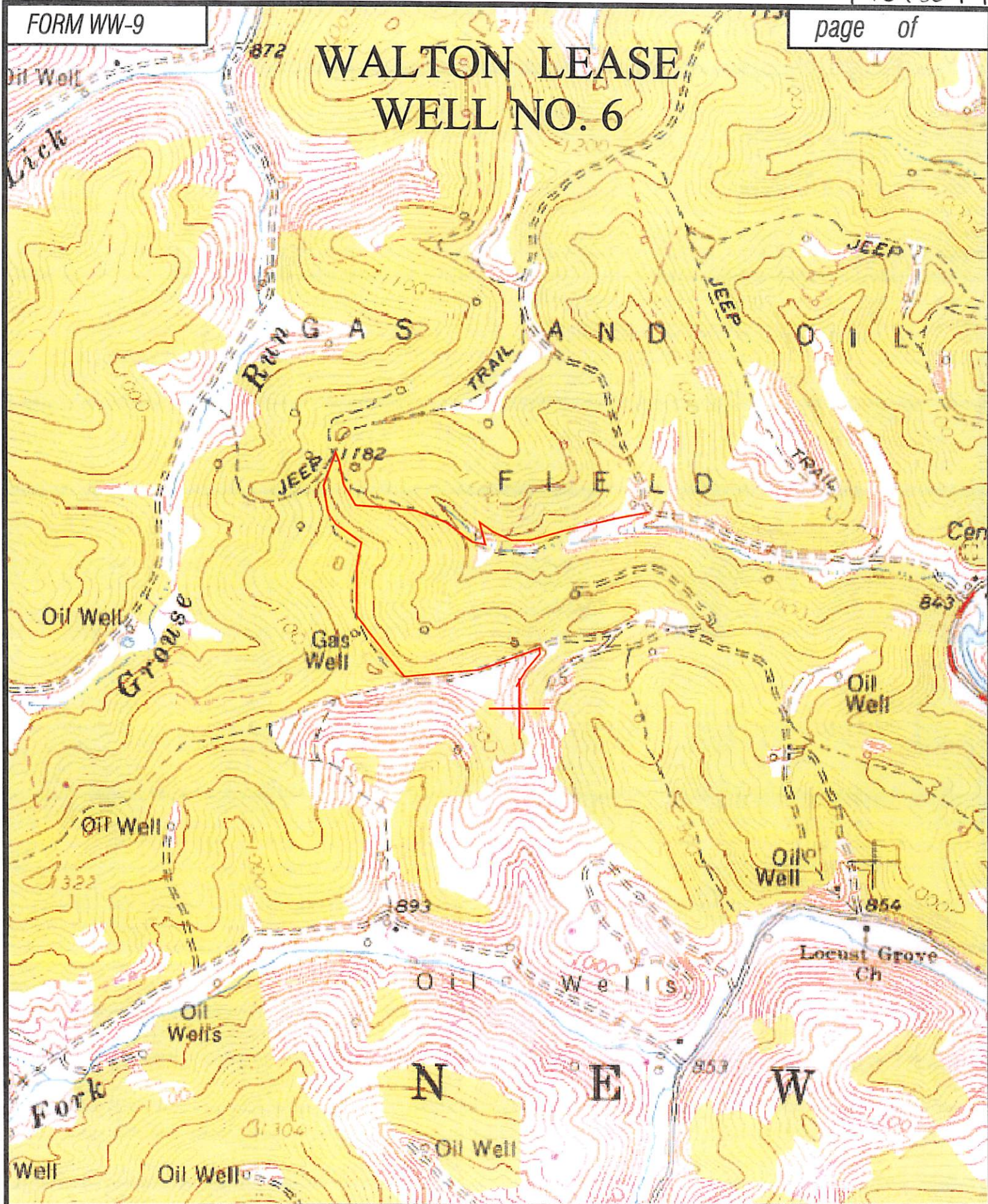
CUT & STACK ALL MARKETABLE TIMBER.

STACK BRUSH BELOW LOCATION FOR SEDIMENT CONTROL.

SLS SMITH LAND SURVEYING, INC.
P.O. BOX 150 GLENVILLE, WV. 26351

Phone: (304) 462-5634 Fax: 462-5656 email: sls@slssurveys.com
DRAWN BY JAS DATE 10/17/13 FILE NO. 8104

WALTON LEASE WELL NO. 6



Professional Energy Consultants
A DIVISION OF SOUTH LAND SURVEYING



SERVICES: PROJECT MEASUREMENT, ENGINEERS, ENVIRONMENTAL
SLS
 228 West 7th St., Suite 102, P.O. Box 102, Greer, SC 29615
 Phone: 864.337.5000, Fax: 864.337.5001

TOPO SECTION OF: NEW MILTON 7.5'

FILE NO. 8104

DATE: 10/23/13

SCALE: 1"=1,000'

1704609 R

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

1) Well Operator: J. F. Deem Oil & Gas 307118 Doddridge New Milton New Milton 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Mary Walton # 6 3) Elevation: 1,203'

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Deep _____ / Shallow X

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Coal						
Intermediate	8-5/8"				1236'	
Production	4.5"				5589"	
Tubing						
Liners						

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Sizes: _____
Depths Set _____