

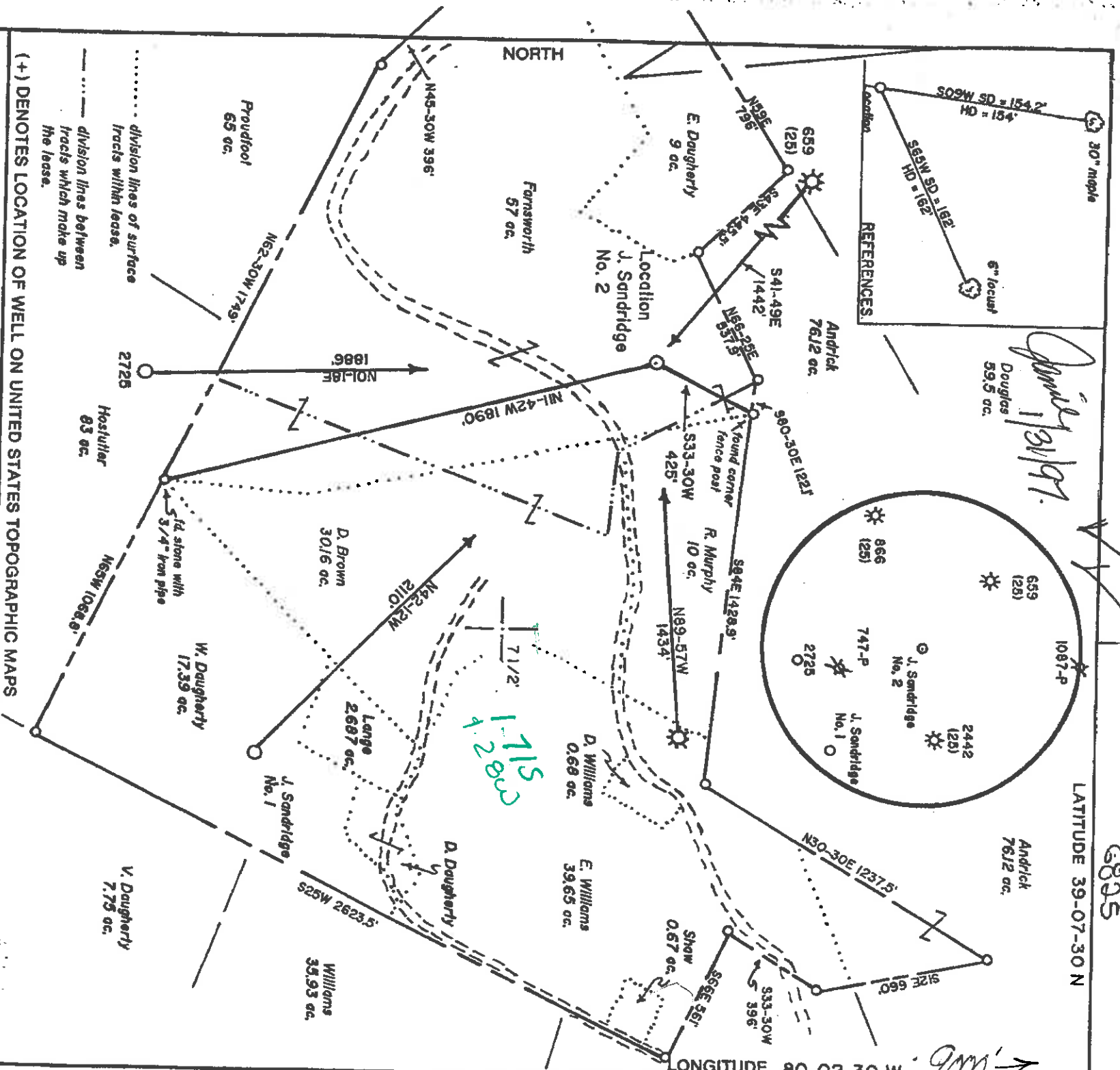
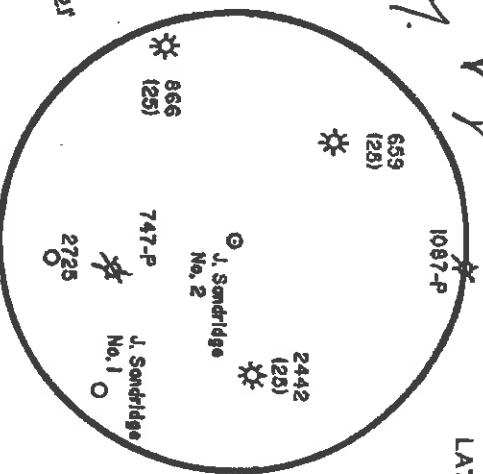
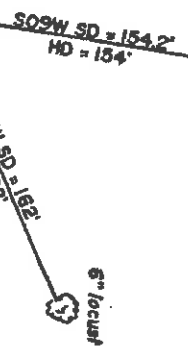
6825

LATITUDE 39-07-30 N

Andrick 7612 ac.

Douglas 59.5 ac.

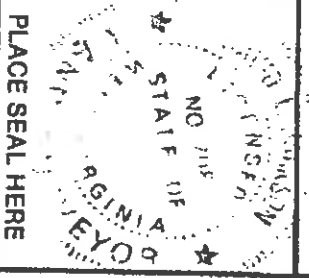
REFERENCES



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. 2
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION Road Junction 3700'
NE of Location: elev. 1746'

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 DEPARTMENT OF ENERGY.
 (SIGNED) David T. Jackson
 R.P.E. _____ L.I.S. 708



STATE OF WEST VIRGINIA
 Division of Environmental Protection
 OFFICE OF OIL AND GAS



DATE January 24, 19 97
 OPERATOR'S WELL NO. J. Sandridge No. 2
 API WELL NO. _____

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1820 WATERSHED Tygart Valley River
 DISTRICT Phillip COUNTY Barbour

SURFACE OWNER Audra T. Lutz QUADRANGLE _____ COUNTY NAME _____
 OIL & GAS ROYALTY OWNER Mark B. Farnsworth ACREAGE 57
J. Sandridge heirs LEASE ACREAGE 170
 PROPOSED WORK: DRILL CONVERT CLEAN OUT AND REPLUG
 STIMULATE DRILL DEEPER REDRILL FRACTURE OR
 FORMATION PLUG OFF OLD FORMATION PERFORATE NEW
 FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ESTIMATED DEPTH 5000' PERMIT _____
 TARGET FORMATION Basson
 WELL OPERATOR Petroleum Development Corp. DESIGNATED AGENT Eric R. Stearns
 ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

1997

RECEIVED
WV Division of
Environmental Protection

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

MAR 27 1997

Permitting Well Operator's Report of Well Work
Office of Oil & Gas
Farm name: FARNSWORTH, MARK Operator Well No.: J.SANDRIDGE #2

LOCATION: Elevation: 1,820.00 Quadrangle: AUDRA County: BARBOUR
District: PHILIPPI
Latitude: 9000 Feet South of 39 Deg. 7 Min. 30 Sec.
Longitude: 6925 Feet West of 80 Deg. 2 Min. 30 Sec.

Company: PETROLEUM DEVELOPMENT CORP.
103 E. MAIN ST. - P.O. BOX 26
BRIDGEPORT, WV 26330-0026

Agent: ERIC STEARNS

Inspector: PHILLIP TRACY
Permit Issued: 02/03/97
Well work Commenced: 02/08/97
Well work Completed: 02/14/97

Verbal Plugging
Permission granted on: _____
Rotary x Cable _____ Rig _____
Total Depth (feet) 4187'
Fresh water depths (ft) _____
48; 621
Salt water depths (ft) _____

^{n/a}
Is coal being mined in area (Y/N)? N
Coal Depths (ft): 72-79; 223-227; 333-338

OPEN FLOW DATA

Producing formation	Benson	Pay zone depth (ft)	4007-4011
Gas: Initial open flow	36 MCF/d Oil: Initial open flow	0	Bbl/d
Final open flow	84 MCF/d	0	Bbl/d
Time of open flow between initial and final tests		4	Hours
Static rock Pressure	1000 psig (surface pressure) after	72	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		Bbl/d
Time of open flow between initial and final tests			Hours
Static rock Pressure	psig (surface pressure) after		Hours

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, INCLUDING COAL ENCOUNTERED BY THE WELLSBORE

For: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns
Date: March 26, 1997

MAR 31 1997

SANDRIDGE #2

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Benson	17 (4007' - 4011')	50	450	500	0

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS:
KB - GL	0	10	
sand, shale, RR	10	1228	1/4" Stream H2O @ 48'
Little Lime	1228	1245	1" Stream H2O @ 621'
sand, shale	1245	1285	Coal @ 72' - 79'
Big Lime	1285	1400	Coal @ 223' - 227'
sand, shale	1400	1402	Coal @ 333' - 338'
Keener	1402	1375	gas chk @ 1515' No Show
sand, shale	1375	1380	gas chk @ 1606' No Show
Big Injun	1380	1495	gas chk @ 1700' No Show
sand, shale	1495	1516	gas chk @ 2010' No Show
Weir	1516	1560	gas chk @ 2196' No Show
sand, shale	1560	1575	gas chk @ 2289' No Show
Gantz	1575	1605	gas chk @ 2446' No Show
sand, shale	1605	1645	gas chk @ 2813' No Show
50 ft	1645	1695	gas chk @ 3618' No Show
sand, shale	1695	1725	gas chk @ 3806' no show
30 ft	1725	1760	gas chk @ 4056' 30/10 thru 1"w/w
sand, shale	1760	1990	gas chk @ TD 26/10 thru 1"w/w
Gordon	1990	2050	gas chk @ DC 12/10 thru 1"w/w
sand, shale	2050	2118	
4th	2118	2210	
sand, shale	2210	2263	
5th	2263	2315	
sand, shale	2315	2318	
Bayard	2318	2362	
sand, shale	2362	2520	
Elizabeth	2520	2575	
sand, shale	2575	2620	
Speechley	2620	2950	
sand, shale	2950	2965	
Balltown	2965	3272	
sand, shale	3272	3300	
Bradford	3300	3463	
sand, shale	3463	3700	
Riley	3700	3960	
sand, shale	3960	4016	
Benson	4016	4028	
sand, shale	4028	4177	

		4187	Drillers TD
			Logger TD

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

1) Well Operator: PETROLEUM DEVELOPMENT CORPORATION ⁶⁸⁷ 38240 225

2) Operator's Well Number: J. Sandridge #2 3) Elevation: 1,810'

4) Well type: (a) Oil / or Gas XX dated 04/03/97

(b) If Gas: Production XX / Underground Storage Deep / Shallow XX / Expires 02/03/99

Proposed Target Formation(s): Elk Sands ⁴³⁶

Proposed Total Depth: 5,300 feet

Approximate fresh water strata depths: 210'; 360'; 390'

Approximate salt water depths: 1450' (if present)

9) Approximate coal seam depths: 185'; 560'

10) Does land contain coal seams tributary to active mine? Yes / No XX /

11) Proposed Well Work: Drill & Stimulate New Well

12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS	FOOTAGE INTERVALS	CEMENT			
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11-3/4"	H-40	42#	30'		
Fresh Water						
Coal						
Intermediate	8-5/8"	H-40	20/23#	1025'	1025'	38CSR18-11.3 38CSR18-11.2.2
Production	4-1/2"	J-55	10.5#	5300'	5300'	38CSR18-11.1 450 sks.
Tubing						
Liners						

PACKERS : Kind _____

Sizes _____

Depths set _____

For Office of Oil and Gas Use Only

Fee(s) paid: Plat

Well Work Permit

Reclamation Fund

WPCCP

Plat WW-9

Well Work Permit

Bond

(Type)

Agent

RECEIVED
DIVISION OF OIL & GAS
MAY 13 1997