

LATITUDE 39°10'00"  
B. NOVAK, ET AL  
148.05 ACRES±

**COX LEASE  
402 ACRES±**

I.L. MORRIS  
183.25 ACRES±

**WELL NO. COX HEIRS 4  
A.P.I. #47-017-4106**

47-017-4103

47-017-4104

47-017-4105

J. HEIM, ET AL  
68.53 ACRES±

PHYLLIS  
HINTERER,  
ET AL  
208.7 ACRES±

P. COPLIN  
27 ACRES±

P. COPLIN  
84 ACRES±

D. BOWYER, ET AL  
80 ACRES±

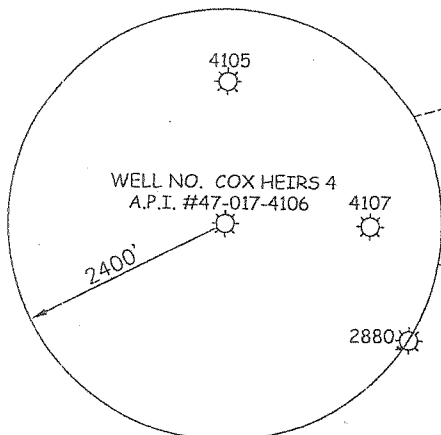
D. BOWYER  
61 ACRES±

COX HEIRS #4  
47-017-4106

D. HINTERER  
62.5 ACRES±

WELL NO. COX HEIRS 4  
A.P.I. #47-017-4106  
STATE PLANE  
COORDINATES

(N) 242,611  
(E) 1,652,689



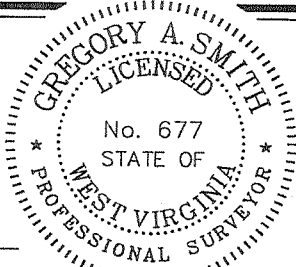
- NOTES ON SURVEY**
1. TIES TO WELLS AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '27.
  2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A DEED RECORDED IN DEED BOOK 108 AT PAGE 272 AND WELL PLAT 47-017-4106.
  3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JULY, 2008.
  4. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).



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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S.  
677

*Gregory A. Smith*



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

DATE FEBRUARY 6, 20 09

OPERATORS WELL NO. COX HEIRS NO. 4

API WELL NO. 47-017-4106W  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 6457P4 (271-73)  
PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 80'

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



WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1,124' WATERSHED TOMS FORK  
DISTRICT NEW MILTON COUNTY DODDRIDGE QUADRANGLE NEW MILTON 7.5'

SURFACE OWNER PHYLLIS HINTERER, ET AL ACREAGE 208.7±  
ROYALTY OWNER JOHN S. COX HEIRS, ET AL LEASE ACREAGE 402±

PROPOSED WORK: LEASE NO. 477300

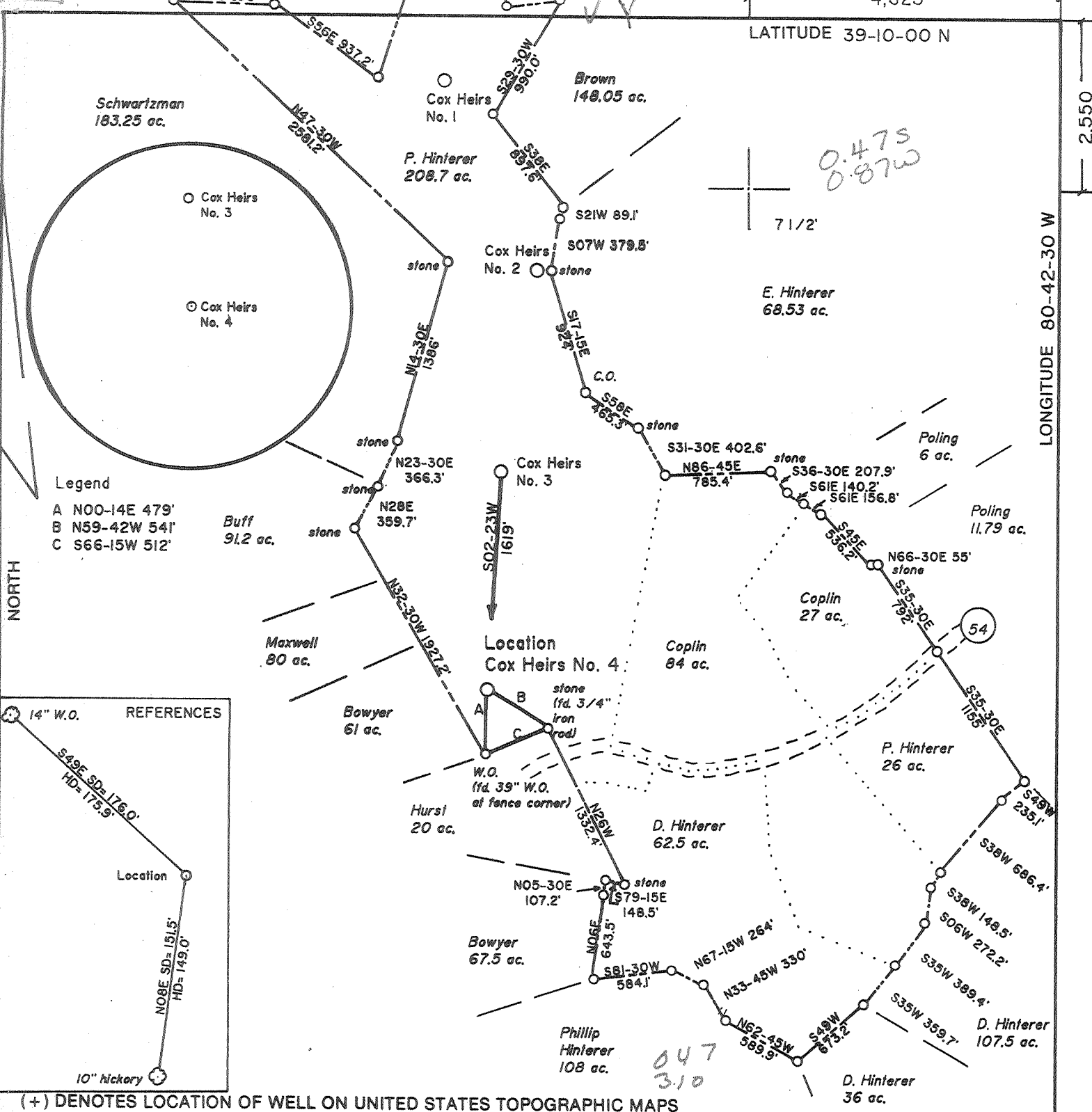
DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION GORDON  
ESTIMATED DEPTH 2,900'

WELL OPERATOR PETROLEUM DEVELOPMENT CORP. DESIGNATED AGENT ALAN H. SMITH  
ADDRESS 120 GENESIS BOULEVARD BRIDGEPORT, WV 26330 ADDRESS 120 GENESIS BOULEVARD BRIDGEPORT, WV 26330

COUNTY NAME DODDRIDGE  
PERMIT 4106W

MAY 01 2009



**Legend**  
 A N00-14E 479'  
 B N59-42W 541'  
 C S66-15W 512'

Buff 91.2 ac.

**REFERENCES**

14" W.O.  
 S49E SP=176.0'  
 HD=175.9'

Location

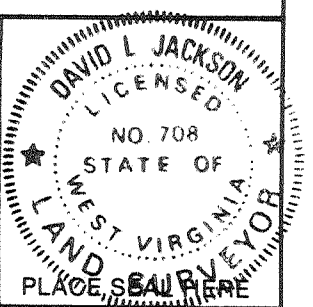
N08E SP=151.5'  
 HD=149.0'

10" hickory

FILE NO. \_\_\_\_\_  
 DRAWING NO. 1  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION Hilltop 980'  
NW of Location: elev. 1337'

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 L. Jackson  
 R.P.E. \_\_\_\_\_ L.L.S. 708



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

DATE February 1, 1994  
 OPERATOR'S WELL NO. Cox Heirs No. 4  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X

LOCATION: ELEVATION 1131 WATERSHED Toms Fork  
 DISTRICT New Milton COUNTY Doddridge  
 QUADRANGLE New Milton 7 1/2' Vader WC

SURFACE OWNER Phyllis Hinterer et al ACREAGE 208.7  
 OIL & GAS ROYALTY OWNER John S. Cox Heirs et al LEASE ACREAGE 402  
 LEASE NO. 477300

PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Benson ESTIMATED DEPTH 5000  
 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

COUNTY NAME \_\_\_\_\_ PERMIT \_\_\_\_\_

WR-35  
Rev (9-11)

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

DATE: 10/16/2012  
API #: 47-017-04106 W

Farm name: Hinter, Phyllis, Et Al Operator Well No.: Cox Heirs 4

LOCATION: Elevation: 1,124' GL Quadrangle: New Milton 7.5

District: New Milton County: Doddridge  
Latitude: 2,830 Feet South of 39 Deg. 10 Min. 00 Sec.  
Longitude 4,620 Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Petroleum Development Corporation

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>120 Genesis Boulevard</u> <u>Bridgeport, WV 26330</u>	<u>16"</u>	<u>12'</u>	<u>12'</u>	<u>Sanded In</u>
Agent: <u>Bob Williamson</u>	<u>11 3/4"</u>	<u>174'</u>	<u>174'</u>	<u>124</u>
Inspector: <u>David Scranage</u>	<u>8 5/8"</u>	<u>1745'</u>	<u>1745'</u>	<u>599</u>
Date Permit Issued: <u>04/27/2009</u>	<u>4 1/2"</u>	<u>5579'</u>	<u>5579'</u>	<u>904</u>
Date Well Work Commenced: <u>07/27/2009</u>				
Date Well Work Completed: <u>07/29/2009</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): <u>5616'</u>				
Total Measured Depth (ft): <u>5616'</u>				
Fresh Water Depth (ft.): <u>127', 1638'</u>				
Salt Water Depth (ft.): <u>None Reported</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>None Reported</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Gordon Pay zone depth (ft) 2838'

Gas: Initial open flow 237 MCF/d Oil: Initial open flow 8 Bbl/d

Final open flow 146 MCF/d Final open flow 3 Bbl/d

Time of open flow between initial and final tests 24 Hours

Static rock Pressure NT psig (surface pressure) after -- Hours

Second producing formation Weir (commingled) Pay zone depth (ft) 2442'

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

2011 10 20 10

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.

  
Signature

10/16/2012  
Date

10/19/2012

Leopold (306) 6-6



COX HEIRS #4

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Alexander	13 (5212' - 5363')	50	400	500	51
2nd	Benson/Riley	12 (4644' - 4997')	50	400	500	45

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	1/2" water @ 127'
sand, shale, RR	10	1943	1/2" water @ 1638'
Maxton	1943	2012	
sand, shale	2012	2204	gas chk @ 2109' No Show
Big Lime	2204	2249	gas chk @ 2173' No Show
sand, shale	2249	2252	gas chk @ 2235' No Show
Big Injun	2252	2326	
sand, shale	2326	2424	gas chk @ 2362' No Show
Weir	2424	2535	
sand, shale	2535	2630	gas chk @ 2580' No Show
Berea	2630	2656	
sand, shale	2656	2819	gas chk @ 2771' No Show
Gordon	2819	2850	
sand, shale	2850	3170	gas chk @ 2990' No Show
5th	3170	3218	gas chk @ 3084' No Show
sand, shale	3218	3470	gas chk @ 3366' No Show
Warren	3470	3642	
sand, shale	3642	3760	
Speechley	3760	4140	
sand, shale	4140	4154	
Balltown	4154	4434	
sand, shale	4434	4491	
Bradford	4491	4642	gas chk @ 4555' No Show
sand, shale	4642	4826	
Riley	4826	4049	
sand, shale	4049	5092	gas chk @ 5056' No Show
Benson	5092	5132	
sand, shale	5132	5186	gas chk @ 5150' No Show
Leopold	5186	5234	
sand, shale	5234	5328	gas chk @ 5305' No Show
Alexander	5328	5469	gas chk @ 5522' No Show
sand, shale	5469	5616	Drillers TD
		5621	Logger TD

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

Well Operator's Report of Well Work

Farm name: HINTERER, PHYLLIS ETAL. Operator Well No.: COX HEIRS #4

LOCATION: Elevation: Quadrangle:

District: NEW MILTON County: DODDRIDGE  
Latitude: Feet South of Deg. Min. Sec.  
Longitude: Feet West of Deg. Min. Sec.

Company: PETROLEUM DEVELOPMENT COR  
P. O. BOX 26  
BRIDGEPORT, WV 26330-0026

Agent: ERIC R. STEARNS

Inspector: MIKE UNDERWOOD  
Permit Issued: 02/09/94  
Well work Commenced: 03/08/94  
Well work Completed: 03/23/94  
Verbal Plugging  
Permission granted on:

Rotary x Cable Rig  
Total Depth (feet) 5616'  
Fresh water depths (ft) 127; 1638

Salt water depths (ft) n/a

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): n/a

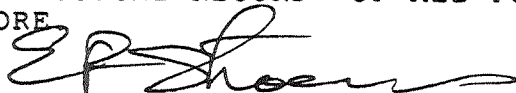
Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	12'	12'	
11 3/4"	174'	174'	105 sks
8 5/8"	1745'	1745'	450 sks
4 1/2"	5579'	5579'	535 sks

OPEN FLOW DATA

Producing formation Alexander Pay zone depth (ft) 5212-5363  
Gas: Initial open flow ns MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 330 MCF/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 4 Hours  
Static rock Pressure 2000 psig (surface pressure) after 72 Hours

Second producing formation Benson/Riley Pay zone depth (ft) 4644-4997  
Gas: Initial open flow co-mingled MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow co-mingled MCF/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 0 Hours  
Static rock Pressure 0 psig (surface pressure) after 0 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 WELLBORE



For: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns

Date: April 28, 1994

DX HEIRS #4

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
st	Alexander	13 (5212' - 5363')	50	400	500*	51
nd	Benson/Riley	12 (4644' - 4997')	50	400	500	45

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
B - GL	0	10	1/2" water @ 127'
and, shale, RR	10	1943	1/2" water @ 1638'
axton	1943	2012	
and, shale	2012	2204	gas chk @ 2109' No Show
ig Lime	2204	2249	gas chk @ 2173' No Show
and, shale	2249	2252	gas chk @ 2235' No Show
ig Injun	2252	2326	
and, shale	2326	2424	gas chk @ 2362' No Show
eir	2424	2535	
and, shale	2535	2630	gas chk @ 2580' No Show
ereea	2630	2656	
and, shale	2656	2819	gas chk @ 2771' No Show
ordon	2819	2850	
and, shale	2850	3170	gas chk @ 2990' No Show
th	3170	3218	gas chk @ 3084' No Show
and, shale	3218	3470	gas chk @ 3366' No Show
arren	3470	3642	
and, shale	3642	3760	
peechley	3760	4140	
and, shale	4140	4154	
alltown	4154	4434	
and, shale	4434	4491	
radford	4491	4642	gas chk @ 4555' No Show
and, shale	4642	4826	
iley	4826	4049	
and, shale	4049	5092	gas chk @ 5056' No Show
enson	5092	5132	
and, shale	5132	5186	gas chk @ 5150' No Show
Leopold	5186	5234	
and, shale	5234	5328	gas chk @ 5305' No Show
Alexander	5328	5469	gas chk @ 5522' No Show
and, shale	5469	5616	Drillers TD
		5621	Logger TD