

HOLTZ LEASE 14 ACRES ± WELL NO. 1

LONG. 80°46'12.7" LATITUDE 39°20'00"

WELL NO. 1
STATE PLANE
COORDINATES
(N) 292,311
(E) 1,840,528

CLARENCE RAY
DONNELL, ET. AL
13.78 AC±
(SURFACE)

FRANK HOLTZ, JR., ET AL
13.56 AC±
(SURFACE)

JIMMIE TRENT
SHANNONDALE
ADDITION
24 AC±
(SURFACE)
TRACT "A"
24" BLACK
WALNUT STUMP

FRANK HOLTZ, JR., ET AL
13.56 AC±
(SURFACE)

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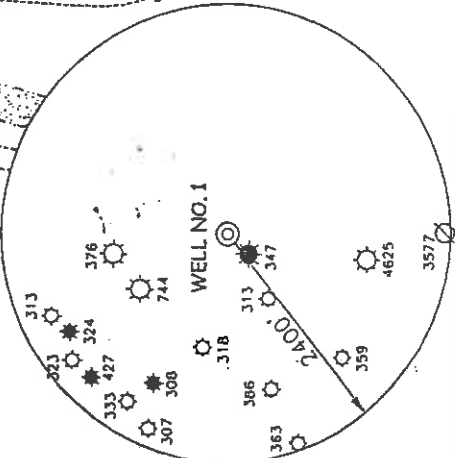
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LINE	BEARING	DISTANCE
L1	N 33°00' E	76.00'
L2	N 60°00' W	12.00'
L3	N 57°45' W	87.00'
L4	S 31°15' W	145.60'
L5	S 51°00' E	7.00'
L6	N 33°45' W	26.00'
L7	N 53°30' E	21.40'
L8	N 35°45' W	21.90'
L9	N 53°30' E	21.35'
L10	N 38°15' W	49.60'
L11	S 54°30' W	97.00'
L12	S 56°45' W	41.80'

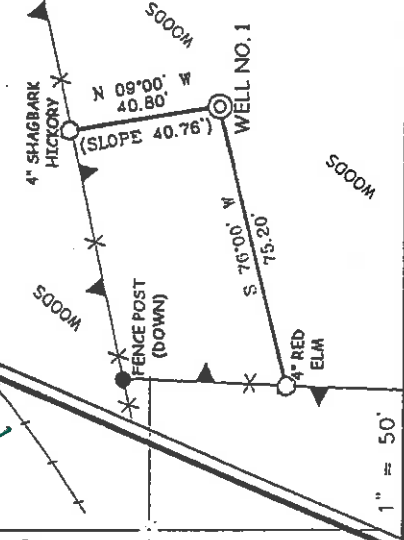


NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 6/6/02.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A TITLE OPINION DATED 6/03/02 AS PREPARED BY GARY MORRIS, LAWYER.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JUNE, 2002.
5. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

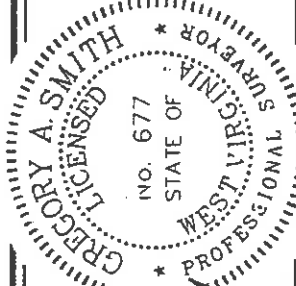
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REFERENCES



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 ENVIRONMENTAL PROTECTION.

P.S. *Gregory A. Smith*
677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE JUNE 6, 20 02
OPERATORS WELL NO. HOLTZ NO. 1
API WELL NO. 47-17-04693
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 5032P1(126-1)
PROVEN SOURCE SCALE 1" = 400'
OF ELEVATION TOP OF KNOB ELEVATION 1,235'

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

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

LOCATION : ELEVATION 1013' WATERSHED MIDDLE ISLAND CREEK
DISTRICT WEST UNION COUNTY DODDRIDGE QUADRANGLE WEST UNION 7.5'

SURFACE OWNER FRANK HOLTZ, JR. ET AL ACREAGE 13.66±
ROYALTY OWNER FRANK HOLTZ, JR. ET AL LEASE ACREAGE 14.0± LEASE NO. _____

PROPOSED WORK :
DRILL ___ X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ X PLUG OFF OLD FORMATION ___ PERFORM NEW FORMATION ___ PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ OTHER ___
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5,600'

WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JAN CHAPMAN 1111 7 2308
ADDRESS 22 GARTON PLAZA WESTON, WV 26452

6-6 99

0000 4693

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

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Well Operator's Report of Well Work

Farm Name: FRANK HOLTZ, JR. ET. AL.

Operator Well No. : HOLTZ #1

LOCATION: Elevation: 1013.00

Quadrangle: WEST UNION

District: WEST UNION

County: DODDRIDGE

Latitude: 13,720 Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude: 5,720 Feet West of 80 Deg. 45 Min. 00 Sec.

Company: KEY OIL COMPANY
22 GARTON PLAZA
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 07/03/02
Well Work Commenced: 08/17/02
Well Work Completed: 08/20/02

Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5368'
Fresh water depths (ft) 41'
Salt water depths (ft) NONE

Is coal being mined in area (Y / N) ? N
Coal Depths (ft) : 41' to 44' (3')

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
8 5/8"	1013'	1013'	230 sks To Surface
4 1/2"	5283'	5283'	475 sks

Office of Oil and Gas
Parkersburg
DEC 04 2002
WV Department of Environmental Protection

OPEN FLOW DATA

Warren
Speechley
Rileys
Benson

3242' - 3303'
3312' - 3404'
4406' - 4832'
4884' - 4897'

Producing formation Alexander
 Gas: Initial open flow _____ MCF / d Odor _____ MCF / d
 Final open flow 2,398 MCF / d Oil: Initial open flow _____ Bbl / d
 Time of open flow between initial and final tests _____ N/A Oil: Final open flow _____ show _____ Bbl / d
 Static rock pressure 1840 psig (surface pressure) after _____ 96 Hours _____ Hours

Second producing formation Commingled
 Gas: Initial open flow _____ MCF / d Pay zone depth (ft) _____
 Final open flow _____ MCF / d Oil: Initial open flow _____ Bbl / d
 Time of open flow between initial and final tests _____ Oil: Final open flow _____ Bbl / d
 Static rock pressure _____ psig (surface pressure) after _____ Hours _____ 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: KEY OIL COMPANY

By: 
Date: October 1, 2002

PRESIDENT

0000 4693

Holtz #1 (47-017 - 4693)
Four Stage Foam Frac – BJ Services

1 st Stage:	Alexander (15 holes) (5147.25' to 5219')	60 Quality Foam. 500 gal. 15% HCL. 60,000# 20/40 sand, 550,000 SCF N2, 816 bbls foam.
2 nd Stage:	Benson (7 holes) (4892' to 4893.50') Third Riley (6 holes) (4811.25' to 4819.75')	60 Quality Foam. 750 gal 15% HCL. 35,000# 20/40 sand, 390,000 SCF N2, 573 bbls foam.
3 rd Stage:	Riley (13 holes) (4440.75' to 4471')	60 Quality Foam 750 gal 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 440,000 SCF N2, 651 bbls foam.
4 th Stage:	Speechley (6 holes) (3350.50' to 3394.75') Warren (6 holes) (3246.5' to 3292.5')	60 Quality Foam. 1,000 gal 15% HCL. 5,000# 80/100 sand, 35,000# 20/40 sand, 464,000 SCF N2, 593 bbls foam.

WELL LOG

KB-GL	0	10	
Fill	10	13	
Sand & Shale	13	41	Damp @ 41'
Coal	41	44	
Sand & Shale	44	240	
Sand	240	260	
Sand & Shale	260	545	
Sand	545	562	
Sand & Shale	562	664	
Red Rock	664	790	
Sand & Shale	790	1726	
Sand	1726	1798	
Shale	1798	1816	
Little Lime	1816	1830	
Shale & Lime	1830	1845	
Big Lime	1845	1912	
Keener	1912	1928	
Big Injun	1928	1988	
Squaw	1988	2020	
Sand & Shale	2020	2170	
Weir	2170	2265	
Shale	2265	2379	
Berea	2379	2385	
Shale	2385	2574	
Gordon	2574	2622	
Shale	2622	3242	
Warren	3242	3303	
Shale	3303	3312	
Speechley	3312	3404	
Siltstone & Shale	3404	4406	
Riley	4406	4492	
Shale	4492	4800	
Third Riley	4800	4832	
Shale	4832	4884	
Benson	4884	4897	
Shale	4897	5128	
Alexander	5128	5221	
Sand & Shale	5221	5368	
T.D.	5368		

Gas Checks

1756' - Odor
1960' - Odor
2100' - Odor
2669' - Odor
3299' - Odor
3705' - Odor
4923' - Odor
4863' - Odor
5147' - Odor