

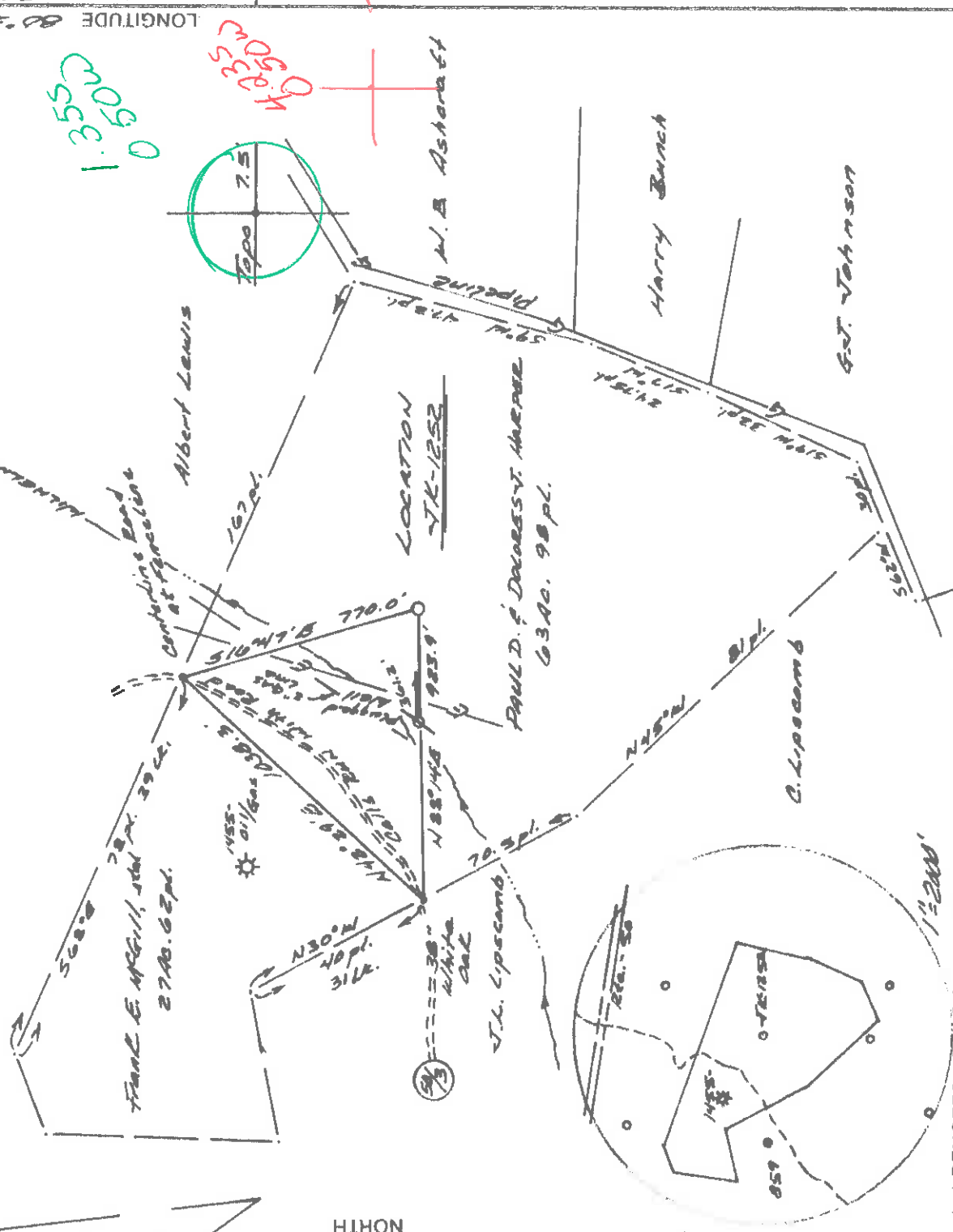
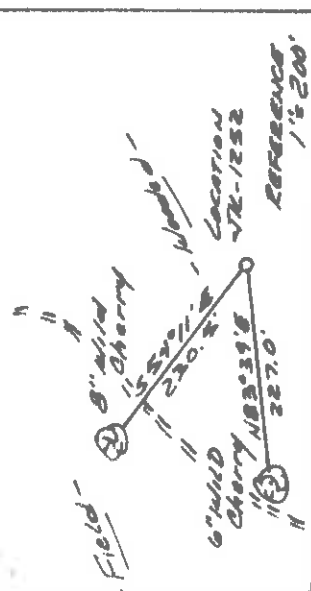
39.20 2,000'

LATITUDE 39°17'30" LONGITUDE 80°50'00"

2-16-85

COBE

PLOT



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

FILE NO. 34601
 DRAWING NO. 85-43
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 200'
 PROVEN SOURCE OF ELEVATION Spot Elev. - 1304'
East of location.

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 MINES, Perennials Land Surveying Inc.
 (SIGNED) Richard J. DeLore
 R.P.E. L.L.S. 553
Buckhannon, WV



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE 18 November, 19 85
 OPERATOR'S WELL NO. JK-1252
 API WELL NO. _____

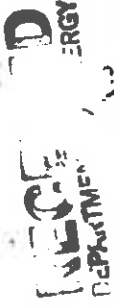
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 980' WATER SHED Central COUNTY Dodderidge STATE 47 COUNTY 017 PERMIT NO. 3479
 DISTRICT Central
 QUADRANGLE West Union COUNTY Dodderidge STATE 47 COUNTY 017 PERMIT NO. 3479
 SURFACE OWNER Paul D. and Dolores J. Happer ACREAGE 6.3 Ac. 98 pl.
 OIL & GAS ROYALTY OWNER Etha E. Britton et al. LEASE ACREAGE 6.3 Ac. 98 pl.

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

PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION Keokuk ESTIMATED DEPTH 5000'
 WELL OPERATOR VI ENTERPRISES, INC. DESIGNATED AGENT RICHARD REDDEYKIEF
 ADDRESS P.O. Box 48 427 ADDRESS P.O. Box 48 Buckhannon, WV 26201

6-6 Greenwood (89)

DEC 23 1985



Date January 8, 1986
 Operator's Well No. JK-1252
 Farm Edna Britton
 API No. 47 - 017 - 3479

State of West Virginia
Department of Mines
Oil and Gas Division

JAN 9 1986

WELL OPERATOR'S REPORT
 OF
 DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas x / Liquid Injection / Waste Disposal / Shallow x /
 (If "Gas," Production x / Underground Storage / Deep / Shallow x /)

LOCATION: Elevation: 960 Watershed Wilhelm Run
 District: Central County Doddridge Quadrangle West Union

COMPANY J&J Enterprises, Inc
 ADDRESS P.O. Box 48, Buckhannon, WV 26201
 DESIGNATED AGENT Richard Reddecliff
 ADDRESS P.O. Box 48, Buckhannon, WV 26201
 SURFACE OWNER Paul & Delores J. Harper
 ADDRESS 141 Camden Ave., Buckhannon, WV 26201
 MINERAL RIGHTS OWNER Edna R. Britton & others
 ADDRESS _____

OIL AND GAS INSPECTOR FOR THIS WORK Mike
Rt. # 2, Box 135
Underwood ADDRESS Salem, WV 26426
 PERMIT ISSUED 12/16/85
 DRILLING COMMENCED 12/21/85
 DRILLING COMPLETED 12/30/85

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
CN

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cord.			
13-10"	156.49	156.49	70 sks.
9 5/8			
8 5/8	1587.45	1587.45	100 sks.
7			
5 1/2			
4 1/2	5326.13	5326.13	270 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth 5211-43 feet
 Depth of completed well 5423 feet Rotary x / Cable Tools _____
 Water strata depth: Fresh 45,250 feet; Salt 0 feet
 Coal seam depths: None Is coal being mined in the area? No.

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 521143 feet
 Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
 Combined Final open flow 808 Mcf/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests 4 hours
 Static rock pressure 1700 psig (surface measurement) after 96 hours shut in
 (If applicable due to multiple completion--)
 Second producing formation Benson & Riley Pay zone depth 4424-4543 feet
 Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
 Final open flow _____ Mcf/d Oil: Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ hours
 Static rock pressure _____ psig (surface measurement) after _____ hours shut in

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSIC CHANGE, ETC.

Riley: Perforations: 4424-25 (3 holes) 4507-08 (3 holes) 4521-24 (6 holes) 4542-43 (3 holes)
 Fracturing: 300 sks. 20/40 sand: 500 gal. acid: 417 Bbls. fluid.
 Benson: Perforations: 4944-46 (8 holes)
 Fracturing: 300 sks. 20/40 sand: 500 gal. acid: 567 Bbls. fluid.
 Alexander: Perforations: 5211-15 (7 holes) 5228-32 (7 holes) 5243-43.5 (2 holes)
 Fracturing: 600 sks. 20/40 sand: 500 gal. acid: 679 Bbls. fluid.

BOTTOM HOLE PRESSURE PF=Pwe XGIS

$$t=60+(5326 \times 0.0075)+459.7 = 559.6 \quad X=53.34 \quad \frac{1}{53.34(559.6)} = \frac{1}{29849} = 0.0000335 \quad PF=(1700)(2.72)$$

$$(0.0000335)(0.698)(4833.5)(0.9) \quad PF=(1700)(2.72)(0.1017) = (1700)(1.107)$$

Pf=1882 psi

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Top Soil			0	5	
Red rock, shale & sand			5	55	1/2" stream @ 45'
Red rock, shale & sand			55	135	
Red rock, shale & sand			135	200	1" stream @ 250'
Shale & sand			200	260	
Red rock			260	300	
Red rock & shale			300	465	Gas ck @ 2113 6/10-1/4" w/water 25.83 cu.ft.
Sand & shale			465	685	
Sand & shale			685	815	
Red rock, sand & shale			815	1035	Gas ck @ 2591 6/10-1/4" w/water 25.83 cu.ft.
Red rock & shale			1035	1125	
Sand & shale			1125	1235	
Sand & shale			1235	1820	Gas ck @ 3538 No show
Sand & shale			1820	1980	
Lime			1980	2060	Gas ck @ 4156 No show
Sand			2060	2110	
Sand & shale			2110	2300	Gas ck @ 4585 No show
Sand & shale			2300	3535	
Sand & shale			3535	4424	Gas ck @ 4929 No show
Riley.			4424	4543	
Sand & shale			4543	4944	
Benson			4944	4946	
Sand & shale			4946	5211	
Alexander			5211	5243	
Sand & shale			5243	5243	

Big
w/ln
GSR
Top Dev ~ 2480'

(Attach separate sheets as necessary)

J&J Enterprises, Inc.
 Well Operator
 By: Daniel F. Stark
 Date: 1/8/85
 Daniel F. Stark - Geologist

Note: Regulation 2.02(i) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic
 detailed geological record of all formations, including
 perforations in the drilling of a well."



1) Date: 18 November, 1985
2) Operator's Well No. JK-1252
3) API Well No. 47-017-3479 State County Permit

RECEIVED
DEC 11 1985

STATE OF WEST VIRGINIA
DIVISION OF OPERATIONS OF ENERGY, OIL AND GAS DIVISION
DEPARTMENT OF ENERGY APPLICATION FOR A WELL WORK PERMIT

4) WELL TYPE: A Oil Gas B (If "Gas", Production / Underground storage
Elevation: 960' Watershed: Wilhelm Run Deep / Shallow
District: Central 427 County: Doddridge Quadrangle: West Union
6) WELL OPERATOR: J&J Enterprises, CODE: 24150 7) DESIGNATED AGENT: Richard Reddecliff
Address: PO Box 48 Inc. Address: PO Box 48
Buckhannon, WV 26201 Address: Buckhannon, WV 26201
8) OIL & GAS INSPECTOR TO BE NOTIFIED
Name: Mike Underwood 9) DRILLING CONTRACTOR:
Address: Rt. 2, Box 135 Name: SW Jack Drilling Co.
Salem, WV 26426 Address: PO Box 48
Buckhannon, WV 26201

10) PROPOSED WELL WORK: Drill deeper / Redrill / Stimulate
Plug off old formation / Perforate new formation
Other physical change in well (specify):
11) GEOLOGICAL TARGET FORMATION, Alexander 439
12) Estimated depth of completed well, 5600 feet
13) Approximate true depths: Fresh, 35' feet; salt, - feet.
14) Approximate coal seam depths: 100 to 420' APPROX coal being mined in the area? Yes No

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used		
Conductor	11 3/4	H-40	42	X	X	150' 30'	Left in well 150' 8'
Fresh water	8 5/8	ERW	23	X	X	1560	to surface as req. by
Coal	8 5/8	ERW	23	X	X	1560	to surface Sizes rule 15.05
Intermediate							
Production	4.5	J-55	10.5	X	X	5550	450 sks Depths set as req. by rule 15.01
Tubing							
Lin...							

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-017-3479 Date December 16 1985

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires December 16, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>✓</u>	Agent: <u>ARB</u>	Plat: <u>MW</u>	Casing: <u>MW</u>	Fee: <u>2107</u>	WPCP: <u>MW</u>	S&E: <u>MW</u>	Other: <u>MW</u>
----------------	-------------------	-----------------	-------------------	------------------	-----------------	----------------	------------------

NOTE: Keep one copy of this permit posted at the drilling location.
John L. Johnston by Margaret J. Hall
Director, Division of Oil and Gas File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

