

10-26-85

CODE CARD PLOT

2580'

LATITUDE 38° 05' 00"

LONGITUDE 81° 05' 00"

Electro Metallurgical Co.

Marrs Branch

To North Fayette

Concrete Mon. With Brass Plate

T-Rails

N 34-59 E 396.39

Berwind Land Company Tract No. 87 - 536 Acres Part Of 11,720 Ac. Lease

S 53-00 E 1735.99

N 67-58 W 1767.07

Proposed Road

Proposed Location & Pit

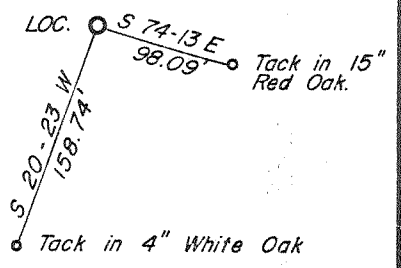
W.Va. Rt. 82

NORTH

To Fayetteville

Note: No Existing Wells Within 5000' of Proposed Well.

Berwind Land Co. Coordinates: Loc. No. 1 N-34,644.68 E-7,011.62



REFERENCE DATA

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 12,145
 PROVEN SOURCE OF ELEVATION USC & GS B.M. # 22-WPA on culvert headwall on Route 16. el. = 1672.90

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.

(SIGNED) John H. Burkett
 R.P.E. 1442 L.I.S. _____

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE October 17, 19 85
 OPERATOR'S WELL NO. 1-Ser. # 106891
 API WELL NO. _____
47 - 019 - 0572-P
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

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

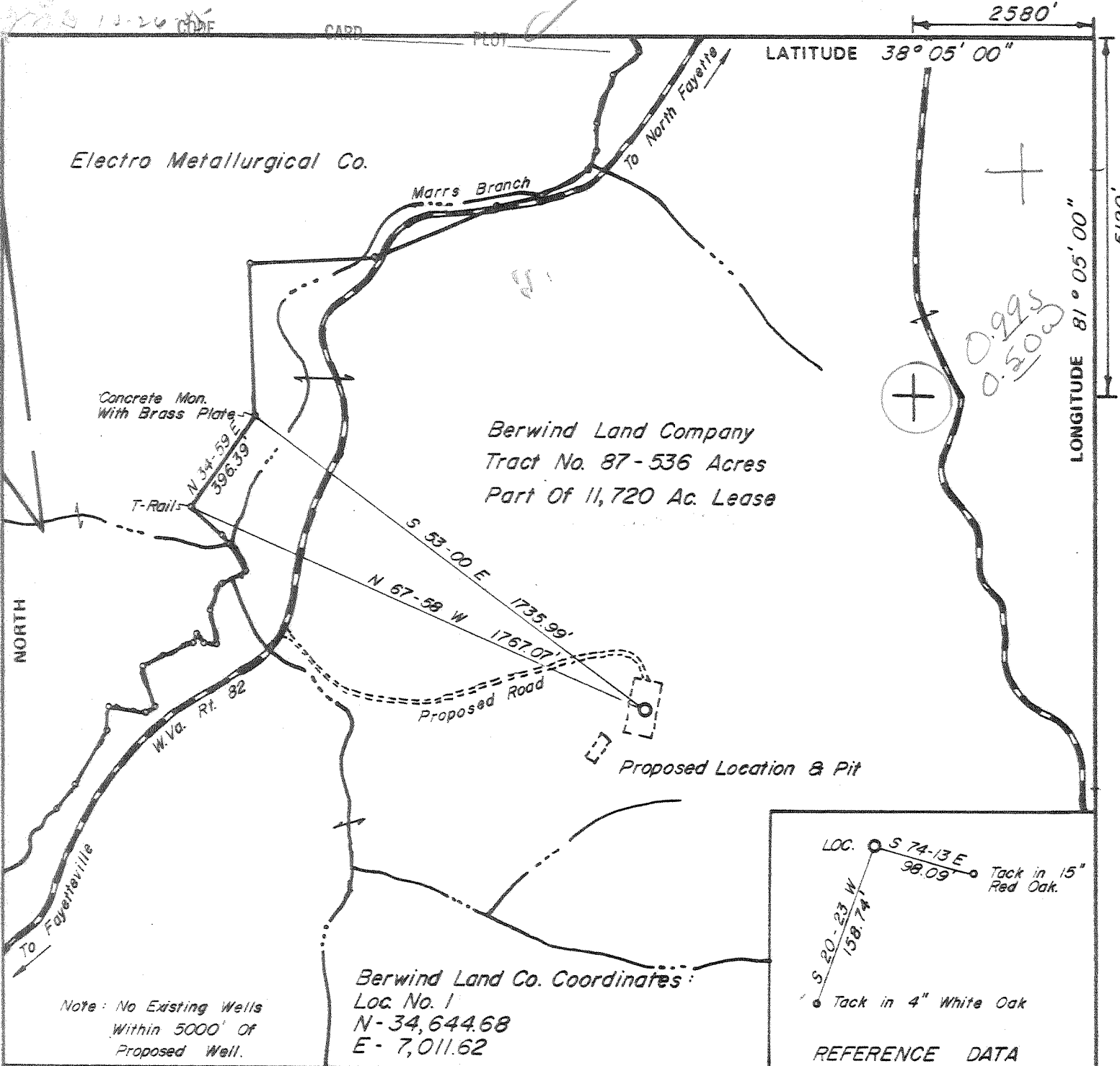
LOCATION: ELEVATION 1707 WATER SHED Marrs Branch of New River
 DISTRICT New Haven COUNTY Fayette
 QUADRANGLE Fayetteville

SURFACE OWNER Berwind Land Co. ACREAGE Several Thousand
 OIL & GAS ROYALTY OWNER Berwind Land Co. LEASE ACREAGE 11,720
 LEASE NO. 67351

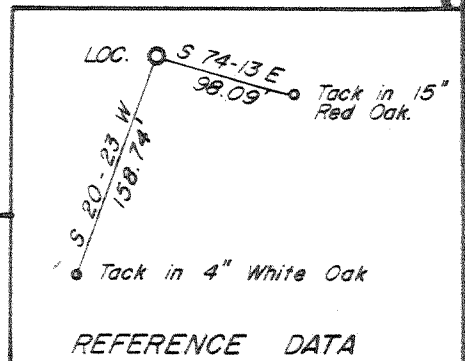
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Newburg ESTIMATED DEPTH 7252 2-0 Ramsey (362)
 WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett
 ADDRESS Box 391 - Ashland, Ky. 41114 ADDRESS Box 379 Brenton, W. Va. 24818

5120' 0572



Berwind Land Co. Coordinates:
 Loc. No. 1
 N - 34,644.68
 E - 7,011.62



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 in 12,145
 PROVEN SOURCE OF ELEVATION U.S.C. & G.S. B.M. # 22-WPA on culvert headwall on Route 16. el. = 1672.90

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 (SIGNED) John H. Burnett
 R.P.E. 1442 L.L.S. _____

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 FORM IV-6 (8-78)



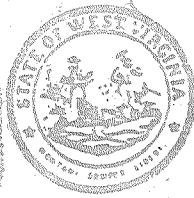
DATE October 17, 1985
 OPERATOR'S WELL NO. 1-Ser. # 106891
 API WELL NO. _____
47 - 019 - 0572
 STATE COUNTY PERMIT

**STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION**

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 1707 WATER SHED Marris Branch of New River
 DISTRICT New Haven 8 COUNTY Fayette
 QUADRANGLE Fayetteville 346 042 508
 SURFACE OWNER Berwind Land Co. ACREAGE Several Thousand
 OIL & GAS ROYALTY OWNER Berwind Land Co. LEASE ACREAGE 11,720
 LEASE NO. 67351
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Newburg 043 ESTIMATED DEPTH 7252
 WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett
 ADDRESS Box 391 - Ashland, Ky. 41114 ADDRESS Box 379 Brenton, W.Va. 24818

NOV 4 1985

RECEIVED
APR 11 1986



DIVISION OF OIL & GAS of West Virginia
DEPARTMENT OF ENERGY
Oil and Gas Division

Date April 8, 1986
Operator's Well No. 1
Farm Berwind Land Co.
API No. 47 - 019 - 0572

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

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

LOCATION: Elevation: 1707' Watershed Marrs Branch of New River
District: New Haven County Fayette Quadrangle Fayetteville

COMPANY Ashland Exploration, Inc.
ADDRESS P. O. Box 391, Ashland, KY 41114
DESIGNATED AGENT Forrest Burkett
ADDRESS Box 379, Brenton, WV 24818
SURFACE OWNER Berwind Land Co.
ADDRESS 1050 One Valley Square, Charleston, WV
MINERAL RIGHTS OWNER Berwind Land Co.
ADDRESS 1050 One Valley Square, Charleston, WV
OIL AND GAS INSPECTOR FOR THIS WORK Rodney Dillon
ADDRESS Box 30, Scarbro, WV 25917
PERMIT ISSUED 10/25/85
DRILLING COMMENCED 1/13/86
DRILLING COMPLETED 2/21/86
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON 3/23/86

Casing Tubing	Used in Drilling	Left in Well	Cement fill up - Cu. ft.
Size 20-16 Cond.	31'	31'	30sk -
13-10"			
9 5/8	998'	998'	1500sk
8 5/8			
7	6608'	4608'	290sk
5 1/2			
4 1/2			
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Newburg Depth 7252 feet
Depth of completed well 7540 feet Rotary X / Cable Tools ___
Water strata depth: Fresh 100 feet; Salt 3500 feet
Coal seam depths: 493-499 Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation NONE Pay zone depth ___ 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
(If applicable due to multiple completion--)
Second producing formation ___ Pay zone depth ___ 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

(Continue on reverse)

SEP 15 1986

recd. from chas per reg
9/24/86

DETAILS OF PERFORMED INTERVALS, FRACING OR STIMULATION, PHYSICAL CHANGE, ETC.
 Plug back TD - 6670 w/gel wtr, 6670-6560 cmt plug, 6560-2555 gal wtr, P-1 BP @ 2555,
 2555-2430 gel wtr, @ 2430 P-1 BP, 2430-2306 gel wtr, 2306-2256 cmt plug, 2256-970
 gel wtr, @ 970 N1-BP, 970-50 gel wtr, 50-surface cmt plug.

Perf L. Dev. Shale 30H/5940-5960 - N₂ frac using 1,800,000 SCF N₂ & 500 gal 15% HCl.
 BD @ 4700#, MTP 4050# @ 78,000 SCF/min, ISIP 2250#, 15 min 1850#.

Perf U. Dev. Shale 30H/4830-4850 - N₂ frac using 1,800,000 SCF N₂, BD @ 3799#, ATP 3552#
 @ 80,000 SCF/min, ISIP 2578#, 15 min 1990#.

Perf U. Weir 30H/2460-2494 - 75 Q foam frac using 336,000 SCF N₂ @ 10,500 SCF/min,
 40,000# 20/40 sand. BD @ 1880#, ATP 1986# @ 36 B/M, ISIP 1930#, 15 min 1510#, TF 206
 bbl.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sand & Shale			0	695	
Salt Sand			695	1082	
Shale			1082	1307	
Ravenscliff			1307	1418	
Avis LS			1418	1429	
Shale			1429	1606	
Middle Maxton			1606	1652	
Shale			1652	1827	
Lower Maxton			1827	1841	
Shale			1841	1883	
Little Lime			1883	1958	
Pencil Cave			1958	2005	
Big Lime			2005	2330	
Shale			2330	2362	
Injun			2362	2411	
Upper Weir			2411	2512	
Shale			2512	2517	
Lower Weir			2517	2553	
Shale			2553	2804	
Coffee Shale			2804	2831	
Berea			2831	2870	
Devonian Shale			2870	6546	
Onondaga LS			6546	6656	
Oriskany SS			6656	6674	
Lime w/Dolomite			6674	7446	
Newburg SS			7446	7479	
Lime			7479	TD	

DTD 7540
 LTD 7540

(Attach separate sheets as necessary)

ASHLAND EXPLORATION, INC.

Well Operator

By:

Alvin A. Thoma

Date:

April 8, 1986

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
 all encountered in the drilling of a well."

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

<u>Berwind Land Co.</u>	<u>Ashland Exploration, Inc.</u>
<u>Coal Operator or Owner</u>	<u>Name of Well Operator</u>
<u>1050 One Valley Square, Charleston, WV 25301</u>	<u>P. O. Box 391, Ashland, KY 41114</u>
<u>Address</u>	<u>Complete Address</u>
<u>Coal Operator or Owner</u>	<u>Berwind Land Co. No. 1</u> 19 <u>86</u>
<u>Address</u>	<u>WELL AND LOCATION</u>
<u>Berwind Land Co.</u>	<u>New Haven</u> District
<u>Lease or Property Owner</u>	<u>Fayette</u> County
<u>1050 One Valley Sq., Charleston, WV 25301</u>	<u>WELL NO. #1 API #47-019-0572</u>
<u>Address</u>	<u>Berwind Land Co.</u> Farm

STATE INSPECTOR SUPERVISING PLUGGING Rodney Dillon

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Fayette

ss:

Ted Payne and Tom Hatfield

being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by Ashland Exploration, Inc., well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 24 day of March, 19 86, and that the well was plugged and filled in the following manner:

Sand or Zone Record Formation	Filling Material	Plugs Used Size & Kind	Casing	
			CSG PULLED	CSG LEFT IN
7540 (TD) - 6670	gel wtr			
6670-6560	35 sks cmt plug			
6560-2555	gel wtr			
@ 2555'		Baker P-1 BP - 7"		
2555-2430	gel wtr			
@ 2430		Baker P-1 BP - 7"		
2430-2306	gel wtr			
2306-2256	10 sks cmt plug			
2256-970	gel wtr			
@ 970		Baker N-1 BP - 9 5/8"		
970-50	gel wtr			
50-surface	25 sks cmt plug		20"	0 31'
			9 5/8"	0 998'
			7"	2000' 4608'
Coal Seams		Description of Monument		
(Name) 493-498 - covered w/9 5/8" csg & cemented to surface		3' @ surface		
(Name)		w/identification		
(Name)				
(Name)				

[Handwritten Signature]
4/14/86

and that the work of plugging and filling said well was completed on the 8 day of April, 19 86.

And further deponents saith not.

Derek S. Hina
Engineering Technician

Sworn to and subscribed before me this 8 day of April, 19 86.

Wille O. Butler
Notary Public

My commission expires:
9/14/87.

Permit No. 019-0572-P

7/85

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OCT 18 1985



1) Date: October 18, 1985
 2) Operator's: Berwind Land Company
 Well No. 1, Serial No. 106891
 3) API Well No. 47 - 019 - 0572
 State County Permit

STATE OF WEST VIRGINIA

DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas X
 B (If "Gas", Production X / Underground storage / Deep X / Shallow)
- 5) LOCATION: Elevation: 1707' Watershed: Marrs Branch of New River
 District: New Haven 043 County: Fayette Quadrangle: Fayetteville
- 6) WELL OPERATOR Ashland Exploration CODE: 2750 7) DESIGNATED AGENT Forrest Burkett
 Address P.O. Box 391 Address P.O. Box 379
Ashland, KY 41114 Brenton, WV 24818
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Rodney G. Dillo Name Ray Resources Drilling Co.
 Address P.O. Box 30 Address 2101 Washington St., East
Scarbro, WV 25917 Charleston, WV 25311
- 10) PROPOSED WELL WORK: Drill X / Drill deeper / Redrill / Stimulate X
 Plug off old formation / Perforate new formation
 Other physical change in well (specify)
- 11) GEOLOGICAL TARGET FORMATION, Newburg 835
- 12) Estimated depth of completed well, 7252 feet sand base
- 13) Approximate trata depths: Fresh, feet; salt, @ 925' feet.
- 14) Approximate coal seam depths: 550' - possible open ls coal being mined in the area? Yes / No X
- 15) CASING AND TUBING PROGRAM mine

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	20	H-40	94	X		30	30	CTS	Kinds
Fresh water									
Coal	13 3/8	H-40	48	X		600	600	CTS	By make 15.05
Intermediate	9 5/8	H-40	36	X		1000	1000	CTS	
Production	7	N-80	26	X		6350	6350	As Needed	Depths set:
Tubing									
Line	4 1/2	K-55	11.6	X		7252	7252	As Needed	By make 15.05
									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-019-0572 Date October 29 19 85

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 October 29, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee	WPCP	S&E	Other
	<u>A-13</u>	<u>MU</u>	<u>MU</u>	<u>506694</u>	<u>MU</u>	<u>MU</u>	

NOTE: Keep one copy of this permit posted at the drilling location.

[Signature]
Director, Division of Oil and Gas

File