SUBMIT IN TRIPLICATE*

(Other instructions on

Form approved. Budget Bureau No. 42-R1425.

UNITED STATES reverse side)

CARTER TO THE PERSON

DEPARTMENT OF THE INTERIOR						5. LEASE DESIGNATION AND SERIAL NO.
GEOLOGICAL SURVEY						SF 078438
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					ACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
	LL×	DEEPEN [P	LUG BAC	K 🗌	7. UNIT AGREEMENT NAME
b. TYPE OF WELL OIL G WELL WELL	AS OTHER		SINGLE ZONE	MULTIPI ZONE	LE	San Juan 32-9 Unit 8. FARM OR LEASE NAME
2. NAME OF OPERATOR El Paso Na	tural Gas Com	ıpanv				San Juan 32-9 Unit 9. WELL NO.
3. ADDRESS OF OPERATOR)1			17A 10. FIELD AND POOL, OR WILDCAT
PO Box 990, Farmington, NM 87401 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface 1500'N, 1600'W					Blanco Mesa Verde 11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA	
At proposed prod. zone						Sec.8,T-31-N,R-9-W NMPM
	and direction from NEAR					12. COUNTY OR PARISH 13. STATE San Juan NM
15. DISTANCE FROM PROPO LOCATION TO NEARES' PROPERTY OR LEASE I (Also to nearest dri	OSED* C .INE, FT.	1500	16. NO. OF ACRES			of ACRES ASSIGNED HIS WELL W/ 309.37
TO NEAREST WELL, DRILLING, COMPLETED,			20. ROTAL	RY OR CABLE TOOLS		
21. ELEVATIONS (Show wh	ether DF, RT, GR, etc.)			_		22. APPROX. DATE WORK WILL START*
23.	P	ROPOSED CASIN	G AND CEMENTI	NG PROGRA	м	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FO	OOT SETTING	DEPTH		QUANTITY OF CEMENT

13 3/4" 9 5/8" 32.3# 200' 224 cu.ft. to circulate 8 3/4" 7" 20.0# 39881 466 cu.ft.to cover Ojo Alar 6 1/4" 4 1/2"liner 3838-6235**'** 10.5# 422 cu.ft.to fill to 3838'

Selectively perforate and sandwater fracture the Mesa Verde formation.

A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams will be used for blow out prevention on this well.

This gas is dedicated.

The W/2 of Section 8 is dedicated to this well.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

BIGNED J. B. Busco	_ TITLE	Drilling_Clerk	DATE January 16,1978
(This space for Federal or State office use)			
PERMIT NO.		APPROVAL DATE	
APPROVED BY	_ TITLE	wasp	DATE

24.

		All distances must be fr		r the Section.			
Operator	EL PASO NATURAL GAS COMPANY Lease SAN JUAN 32-9 UNIT (SF-078438) Well No. 17A						
Unit Letter F	Section 8	Township 31-N	Range 9-W	County	JUAN		
Actual Foot 1500	age Location of Well:) feet from the	NORTH line and	1600	et from the WEST	line ·		
Ground Leve		mation SA VERDE	Pool BLANCO M	ESA VERDE	309.37 Acres		
1. Out	ine the acreage dedica	ted to the subject we	ll by colored pencil	or hachure marks on the I	plat below.		
1	2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).						
I .	ore than one lease of d d by communitization, t	-		, have the interests of al	l owners been consoli-		
[X	Yes No If a	nswer is "yes;" type of	consolidation	Unitization	· .		
1		owners and tract descr	riptions which have a	actually been consolidate	d. (Use reverse side of		
No a	ed-pooling, or otherwise)			consolidated (by commu ch interests, has been ap			
		XXX			CERTIFICATION		
Я		И	i . i	I hereby cert	ify that the information con-		
N	00	Ø		best of my ki	is true and complete to the nowledge and belief.		
X	18	Я		Origina D	1 Signed by G. Brisco		
)	+-			Drilling	-		
	1600'	Ŋ		El Paso	Natural Gas Co.		
				Sanuary	16, 1978		
	** ** **	section 8	1 1 1	Date	· · · · · · · · · · · · · · · · · · ·		
]	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	rtify that the well location		
B	GT 050100	Ŋ		shown on thi	s plat was plotted from field		
	SF-078438		and the street	under my sup	val surveys made by me or pervision, and that the same		
	† †			is true and knowledge ar	correct to the best of my and belief		
X							
	1	Ŕ		Date Surveyed SEP1	TEMBER 21, 1977		
B	i	Ø	\$	Registered Pro and/or Land Su	fessional Engineer		
				Vane	Miluen		
			2-11-11-11-11-11-11-11-11-11-11-11-11-11	Certificate No.	1760		



P. O BOX 990 FARMINGTON, NEW MEXICO 87401 PHONE: 505-325-2841

Multi-Point Surface Use Plan San Juan 32-9 Unit #17A

- 1. Existing Road Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map.

 All existing and new roads will be properly maintained during the duration of this project.
- 2. Planned Access Roads Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed twenty feet (20') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed if necessary.
- 3. Location of Existing Wells Please refer to Map No. 2
- 4. Location of Tank Batteries, Production Facilities, and Production Gathering and Service Lines Please refer to Maps No. 1 and No. 2.

 Map No. 2 shows the existing gas gathering lines. Map No. 1 shows the existing roads and new proposed access roads. All known production facilities are shown on these two maps.
- 5. Location and Type of Water Supply Water for the proposed project will be obtained from a water hole located at Hart Canyon Water Well.
- 6. Source of Construction Materials No additional materials will be required to build either the access road or the proposed location.

- Methods of Handling Waste Materials All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. When clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the location of which is also shown on Plat No. 1 will be provided for human waste. If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainages; all earthen pits will be so constructed as to prevent leakage from occurring.
- 8. Ancillary Facilities No camps or airstrips will be associated with this project.
- 9. Wellsite Layout Please refer to the attached Plat No. 1.
- 10. Plans for Restoration of the Surface After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed Mixture #2 will be used. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted gray (Federal Standard #595-36357)
- ll. Other Information The terrain is sandstone ledges and rolling hills covered with pinon and cedar trees.

 Cattle graze the proposed project site.

- 12. Operator's Representative W. D. Dawson, Post Office Box 990, Farmington, New Mexico 87401
- 13. Certification -

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by El Paso Natural Gas Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

January 13, 1978

D. R. Read

Division Drilling Engineer

DRR:pb

1

Operations Plan San Juan 32-9 Unit #17A

I. Location: 1500'N, 1600'W, Section 8, T-31-N, R-9-W, San Juan County, NM

Field: Blanco Mesa Verde Elevation: 6695'GL

II. Geology:

Α.	Formation	Tops:	Surface	San Jose	Lewis	3788 '
			Ojo Alamo	1933'	Mesa Verde	5403 '
			Kirtland	2038'	Menefee	5 4 93 '
			Fruitland	3128'	Point Lookout	5785 '
			Pic.Cliffs	3528 '	Total Depth	6235 '

- B. Logging Program: GR-Ind. and GR-Density at Total Depth.
- C. Coring Program: none
- D. Natural Gauges: 5390', 5480', 5775' and at Total Depth.
 Also gauge any noticeable increase in gas. Record all gauges in daily drilling report and on morning report.

III. Drilling:

A. Mud Program: mud from surface to 3988'. Gas from intermediate casing to Total Depth.

IV. Materials:

Α.	Casing Program:	Hole Size	$\frac{\text{Depth}}{200}$	Casing Size	Wt.&Grade
		13 3/4"	200	9 5/8"	32.3# H-40
		8 3/4"	3988'	7"	20.0# K-55
		6 1/4"	3838-6235'	4 1/2"	10.5# K-55

B. Float Equipment: 9 5/8" surface casing - Larkin guide shoe (fig. 102)

7" intermediate casing - Dowell guide shoe (fig. 50101) and Dowell self-fill insert float valve (fig. 53003), 5 B&W stabilizers (Prod. No. 637085) every other joint above shoe. Run float two joints above shoe.

- 4 1/2" liner 4 1/2" liner hanger with neoprene packoff. Larkin geyser shoe (fig. 222) and Larkin flapper type float collar (fig. 404 M&F).
- C. Tubing: 6235' of 2 3/8", 4.7#, J-55 8rd EUE tubing with a common pump seating nipple above perforated pup joint with bull plugged full joint for mud anchor on bottom.
- D. Wellhead Equipment: 10" 900 x 9 5/8" casing head. 10" 900 x 6" 900 xmas tree.

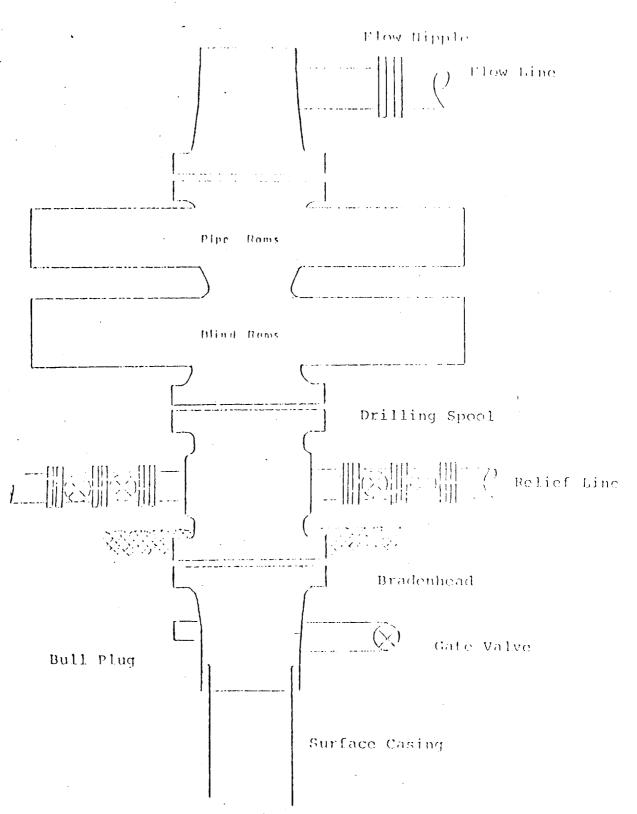
V. Cementing:

- 9 5/8" surface casing use 190 sks. of Class "B" cement with 1/4# gel-flake per sack and 3% calcium chloride (224 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600#/30 minutes.
- 7" intermediate casing use215sks.of 65/35 Class "B" Poz with 6% gel and 2% calcium chloride (8.3 gallons of water per sack) followed by 100 sks. of Class "B" with 2% calcium chloride (466 cu.ft. of slurry, 50% excess to cover Ojo Alamo). Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1200#/30 minutes.
- 4 1/2" liner precede cement with 20 barrels of gel water (2 sks. gel) Cement with 240 sks. of Class "B" cement with 4% gel, 1/4 cu.ft. of fine gilsonite per sack and 0.6% Halad-9 (422 cu.ft. of slurry, 70% excess to circulate liner). WOC 18 hours.

Fart Tunk 12 11/2 136, Roserve Drow Works Mad Tank Cut 8 ft 250

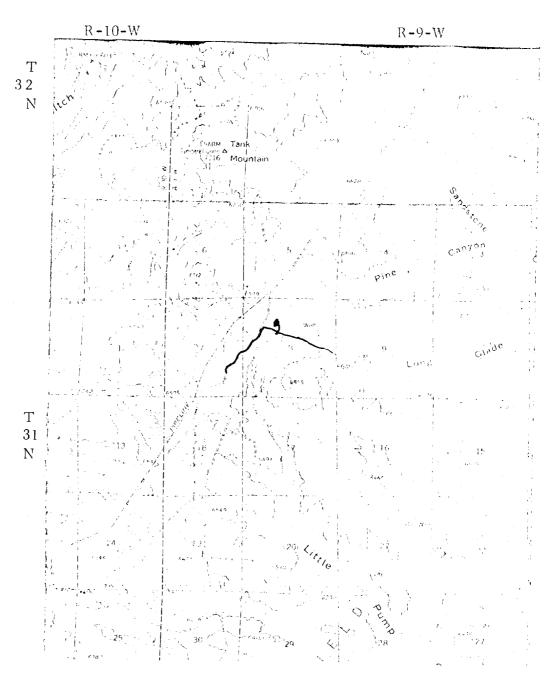
Typical Location Plat for Missa Verde and Litates wells

Typical B.O.F. Installation
for Mena Verde Well



Series 900 Double Gate BOP, rated at 3000 psi Working Pressure When gas drilling operations begin a Shaffer type 50 or equivalent rotating head is installed on top of the flow nipple and the flow line is converted into a blowie line

EL PASO NATURAL CAS COMPANY San Juan 32-9 Unit #17A SENW ---31-9



MAP #1

Thusho os sirah-cu- 1959.

	1000 13	
BWISTILL	INFRANCE	-1+1-
MUSTING	$\mathbb{D}(\mathcal{C}(0)) = \mathbb{D}^{r}(\{\cdot\}),$	Tally-to-to-b
TROPOJED	REMINI	
PROPOSES	17777777	+++
Textstand the	2022 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

EL PASONATURAT, GAS COMPANY San Juan 32-9 Unit #17A SENW :-31-9

R9W LPNG 3 2 Union Tex Pet 11 EPNG So Union Allen Com. 18 15 Texaco EPNG EPNG EPNG Sc Cmon ;;;; 21 22 23 \$5 Sunray G Riddle"D" Barrett EPNG EPNG EPNG EPNG So. Union 26 Riddle C EPNG Mesa Pel Union Tax Fet Co State Com 31 Walker 33 М Prichard Johnston Fea

MAP #2

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY	5. LEASE SF 078438 6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)	7. UNIT AGREEMENT NAME San Juan 32-9 Unit 8. FARM OR LEASE NAME		
1. oil gas well other	San Juan 32-9 Unit 9. WELL NO.		
2. NAME OF OPERATOR EL PASO NATURAL GAS COMPANY 3. ADDRESS OF OPERATOR	17 A 10. FIELD OR WILDCAT NAME Blanco M.V.		
Box 990, Farmington, New Mexico 87401 4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) 1500'N, 1600'W AT SURFACE:	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 8, T-31-N, R-9-W N.M.P.M. 12. COUNTY OR PARISH 13. STATE		
AT TOP PROD. INTERVAL: AT TOTAL DEPTH: 16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	San Juan New Mexico 14. API NO.		
REPORT, OR OTHER DATA REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF: TEST WATER SHUT-OFF	15. ELEVATIONS (SHOW DF, KDB, AND WD) 6695'GL		
FRACTURE TREAT	(NOTE: Report results of multiple completion or zone		
PULL OR ALTER CASING	change on Form 9–330.)		
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly statincluding estimated date of starting any proposed work. If well is different measured and true vertical depths for all markers and zones pertinent.)	lirectionally drilled, give subsurface locations and		
7-29-78 Spudded well. Drilled surface hole. surface casing, 211' set at 225'. Concluded to surface. WOC 12 hours	emented with 224 cu. ft. cement.		

Subsurface Safety Valve: Manu. and Type _____ 18. I hereby certify that the foregoing is true and correct TITLE Drilling Clerk DATE (This space for Federal or State office use) DATE

UNITED STATES DEPARTMENT OF THE INTERIOR **GEOLOGICAL SURVEY**

Form 9-331 Dec. 1973	Budget Bureau No. 42-R1424
- UNITED STATES	5. LEASE
DEPARTMENT OF THE INTERIOR	SF 078438
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAME
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir, Use Form 9–331–C for such proposals.)	San Juan 32-9 Unit
reservoir, Use Form 9-331-C for such proposals.)	8. FARM OR LEASE NAME
1. oil gas well other	San Juan 32-9 Unit
Well — Well Other	9. WELL NO.
2. NAME OF OPERATOR EL PASO NATURAL GAS CO.	17A 10. FIELD OR WILDCAT NAME
	Blanco M.V.
3. ADDRESS OF OPERATOR BOX 289, FARMINGTON, NEW MEXICO	11. SEC., T., R., M., OR BLK. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	AREA Sec. 8, T-31-N, R-9-W
below.)	N.PM
AT SURFACE: 1500'N, 1600'W	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL:	San Juan New Mexico
AT TOTAL DEPTH:	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
	6695' GL
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	
SHOOT OR ACIDIZE	
REPAIR WELL	(NOTE: Report results of multiple completion or zone
PULL OR ALTER CASING [change on Form 9-330.)
MULTIPLE COMPLETE	
ABANDON*	
(other)	
 DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly stat including estimated date of starting any proposed work. If well is d 	lirectionally drilled, give subsurface locations and
measured and true vertical depths for all markers and zones pertiner	nt to this work.)*
8/6/78: T.D. 3980'. Ran 104 joints 7''.	. 20# KS intermediate casing, 3968
set at 3980'. Cemented with 442 cu. ft.	
1200#/30 minutes. Top of cement at 2300	·
8/11/78: T.D. 6230'. Ran 56 joints 4 1	1/2", 10.5#, K-55 casing liner,
2415' set 3815-6230'. Float collar set	at 6211'. Cemented with 417
cu. ft. cement. WOC 18 hours.	
10/7/78: PBTD 6211'. Tested casing to	
5128,5341,5431,5439,5445,5466,5474,5484	
with 1 SPZ. Fraced w/47,000# 20/40 sand	
w/7610 gal. water, Perfed Mass. P.L. 58	309.5814.5823.5828.5850.5854 (OVER)

2. NAME OF OPERATOR	17A
EL PASO NATURAL GAS CO.	10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR	Blanco M.V.
BOX 289, FARMINGTON, NEW MEXICO	11. SEC., T., R., M., OR BLK. AND SURVEY OR
 LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) 	AREA Sec. 8, T-31-N, R-9-W
AT SURFACE: 1500'N, 1600'W	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL:	San Juan New Mexico
AT TOTAL DEPTH:	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	6695' GL
TEST WATER SHUT-OFF	
FRACTURE TREAT	
SHOOT OR ACIDIZE	
REPAIR WELL UPPORT STATES STAT	(NOTE: Report results of multiple completion or zone change on Form 9-330.).
MULTIPLE COMPLETE	Change on Fully 9-330.)
CHANGE ZONES	
ABANDON*	
8/6/78: T.D. 3980'. Ran 104 joints 7", set at 3980'. Cemented with 442 cu. ft. 1200#/30 minutes. Top of cement at 2300 8/11/78: T.D. 6230'. Ran 56 joints 4 1	cement. WOC 12 hours; held
2415' set 3815-6230'. Float collar set cu. ft. cement. WOC 18 hours.	
10/7/78: PBTD 6211'. Tested casing to 5128,5341,5431,5439,5445,5466,5474,5484, with 1 SPZ. Fraced w/47,000# 20/40 sand w/7610 gal. water. Perfed Mass. P.L. 58	5489,5500,5507,5512,5561,5568,559 and 53,870 gal. water. Flushed
18. I hereby certify that the foregoing is true and correct	
SIGNED A. Succession TITLE Drilling Cler	k date10/17/78
(This space for Federal or State offi	ice use)
APPROVED BY TITLE	DATE DATE NOTE IN FRANCE IN FRANCE
CONDITIONS OF APPROVAL, IF ANY:	007.86 1978

*See Instructions on Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements, Consult local. State or Federal office for specific instructions.

Item 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

GPO: 1976 O - 214-149

5861,5564,5873,5877,5887,5899,5915,5917,5929,5941,5975 w/l SPZ. Fraced w/45,000# 20/40 sand and 50,790 gal. water. Flushed w/7940 gal. water. Perfed Lower PL 6006,6019,6052,6047,6070 water. Perfed Lower PL 6006,6019,6052,6047,6070 water. Flushed w/7700 gal. water. Flushed w/7700 gal. water.