

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Suprem Energy Corporation

3. ADDRESS OF OPERATOR

P. O. Box 808, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)

At surface

1645 feet from the South line and 830 feet from the West line.

At proposed prod. zone Same as above.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

10 miles Northwest of Ojito, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

830 ft.

830 ft.

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

2015 ft.

16. NO. OF ACRES IN LEASE

2560

17. NO. OF ACRES ASSIGNED
TO THIS WELL

1 1/2

320 Acres

19. PROPOSED DEPTH

7950 ft.

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6730 Gr.

22. APPROX. DATE WORK WILL START*

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-3/8"	10-3/4"	32.75	290 ft.	175 cu. ft.
9-7/8"	7-3/8"	26.40	4120 ft.	1340 cu. ft.
6-3/4"	5-1/2"	15.30	7950 ft.	643 cu. ft.

It is proposed to drill this well to be completed in the Dakota formation. After the well is drilled, pipe will be run and cemented. The casing will then be perforated and mud water fraced and tubing will be run and set at approximately 7700 feet.

gas is dehydrated

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.

24.

Original Signed By

SIGNED

Rudy D. Motto

TITLE

Area Superintendent

DATE

April 28, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

RECEIVED

MAY 12 1978

GEOLOGICAL SURVEY
FARMINGTON, N.M.

*See Instructions On Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws 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 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

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 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form 1-1-1
Superseded 7-1-77
Effective 1-1-75

All distances must be from the outer boundaries of the Section.

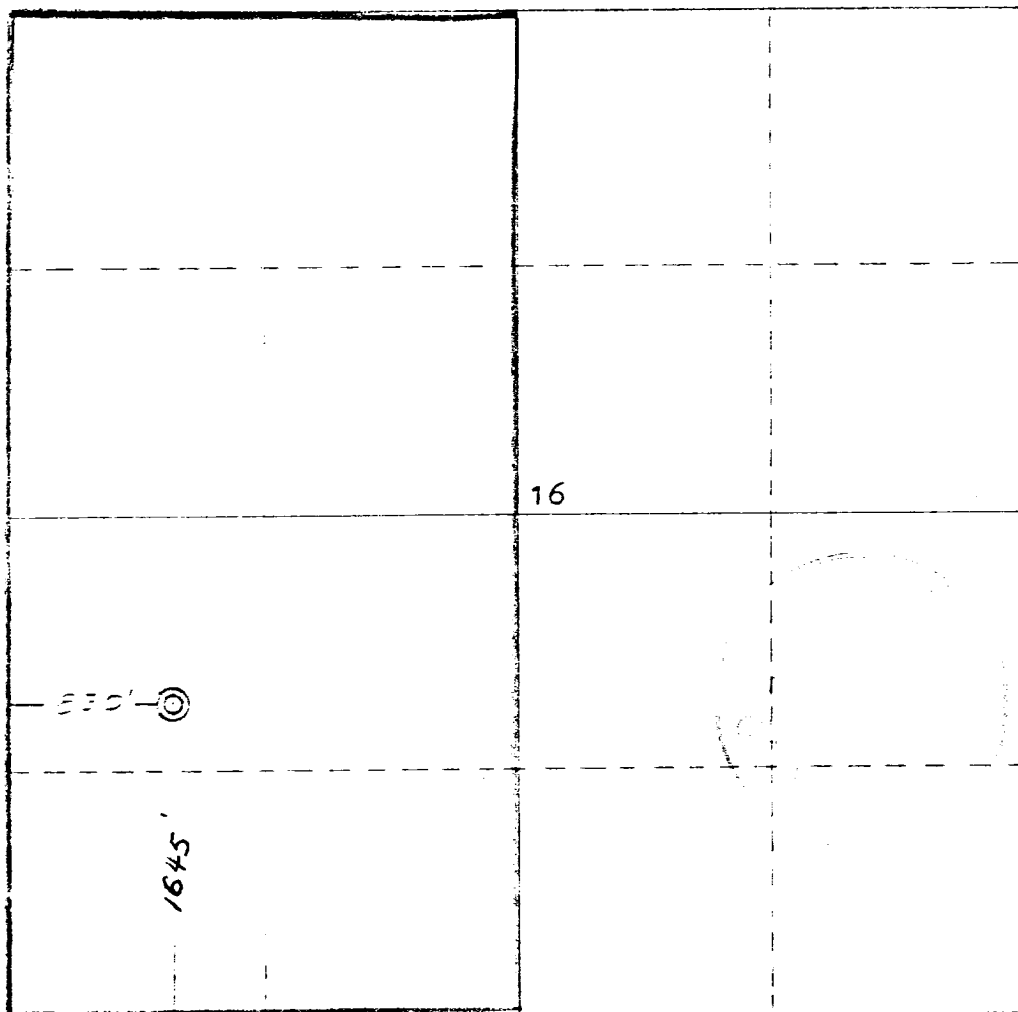
SUPRON ENERGY CORPORATION			Lessee JICARILLA E		Section 15
Unit Letter L	Section 16	Township 26 NORTH	Range 4 WEST	County RIO ARriba	
Actual Distance - Location of Well: 1645 feet from the SOUTH line and 830 feet from the WEST line					
Surface Elev. Elev. 6730	Producing Formation Dakota	Pool Basin	Declarative Acreage 320.360		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
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).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. Use reverse side of this form if necessary.) _____

The acreage will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I, the undersigned, certify that the well location shown hereon is true and correct to the best of my knowledge and belief.

Rudy D. Motto

Rudy D. Motto

Area Superintendent

Supron Energy Corporation

May 11, 1978

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

21 April, 1978

Drill Surveyor

James P. Leese
James P. Leese

Certificate No. 1463

May 11, 1978

United States Geological Survey
P. O. Box 1809
Durango, Colorado 81301

Attention: Mr. Jerry Long

Dear Sir:

Supron Energy Corporation proposes to drill the Jicarilla "E" No. 15 well located 1645 feet from the South line and 830 feet from the West line of Section 16, Township 26 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico.

The following attachments are included with this application:

1. Map of existing roads.
2. Planned access road which is approximately 600 feet long.
3. Location of existing wells.
4. Lateral roads to well locations.
5. Location of surface equipment if required.
6. Drilling and Completion water will be obtained from the Supron Energy Corporation water well located in the SW 1/4, Section 23, Township 26 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico.
7. Waste will be disposed of by being placed in the reserve pit and buried upon completion of the well.
8. There will be no camp at or near the well site.
9. There will be no air strip.
10. A plat is attached showing the location of the rig, mud tanks, reserve pit, burn pit, etc.
11. A letter of Certification is attached.
12. After the well is completed the location will be cleaned up and bladed. When the location is built the reserve pit will be fenced on three sides. After the well is drilled the pit will be fenced off. After the reserve pit dries it will be cleaned up and restored to its natural state.
13. The soil is sandy loam with the principal vegetation being Sage Brush.

JICARILLA "E" NO. 15

SUPPLEMENT TO FORM 9-3310

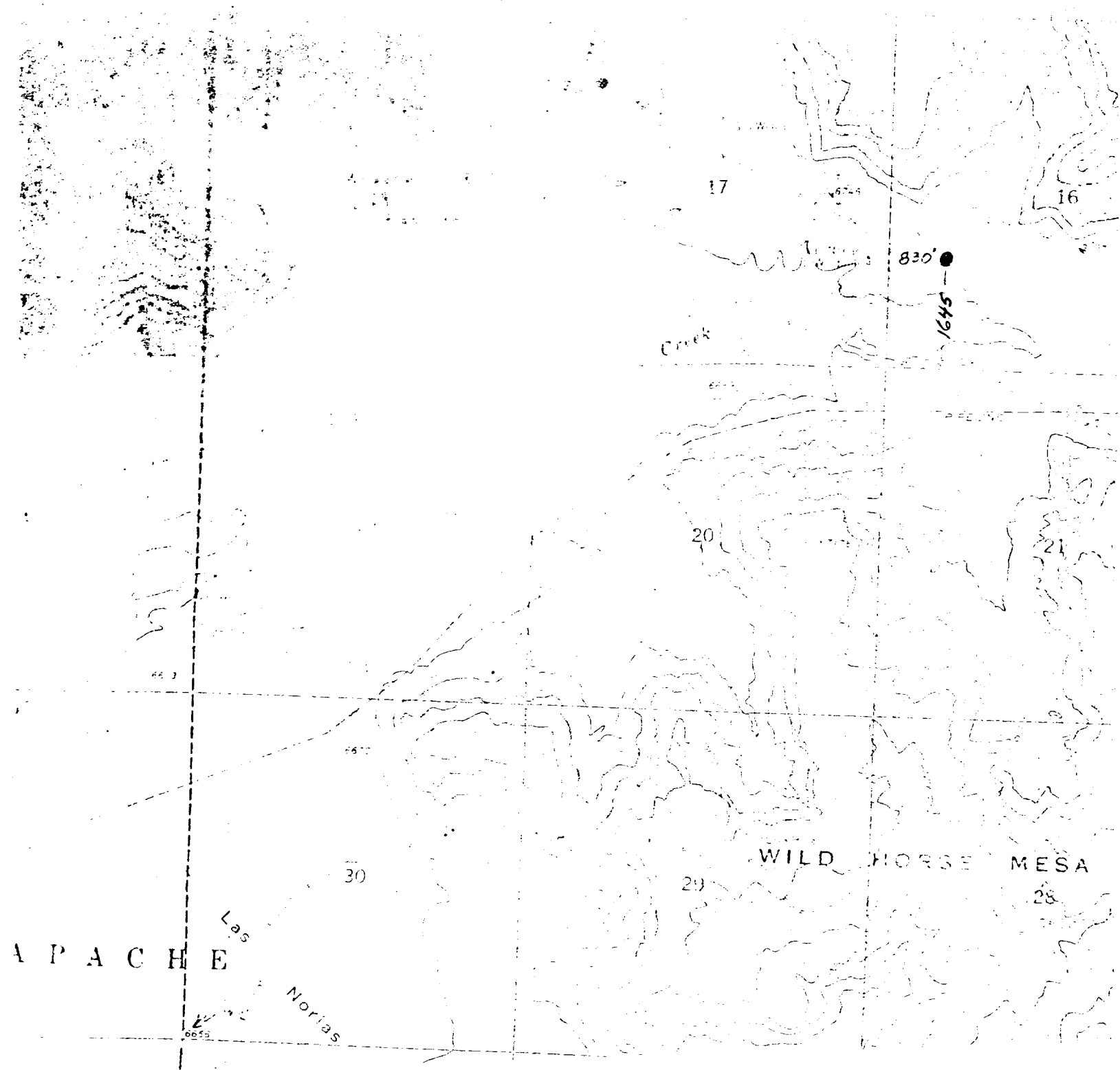
1. The Geologic name of the surface formation is "Wasatch".
2. The estimated tops of important Geologic markers are:

A. Base of Ojo Alamo	3070 Feet
B. Fruitland	3275 feet
C. Pictured Cliffs	3365 feet
D. Cliff House	5025 feet
E. Point Lookout	5510 feet
F. Gallup	6730 feet
G. Dakota	7680 feet
3. The estimated depth at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are:

A. Base of Ojo Alamo	3070 feet - Water
B. Fruitland	3275 feet - Water
C. Pictured Cliffs	3365 feet - Gas
D. Cliff House	5025 feet - Gas
E. Point Lookout	5510 feet - Gas
F. Gallup	6730 feet - Gas
G. Dakota	7680 feet - Gas
4. The casing program is shown on Form 9-3310 and all casing is new.
5. The lessee's pressure control equipment schematics are attached along with minimum specifications, testing procedures and frequencies.
6. The type, estimated volumes and characteristics of the circulating medium are as follows:

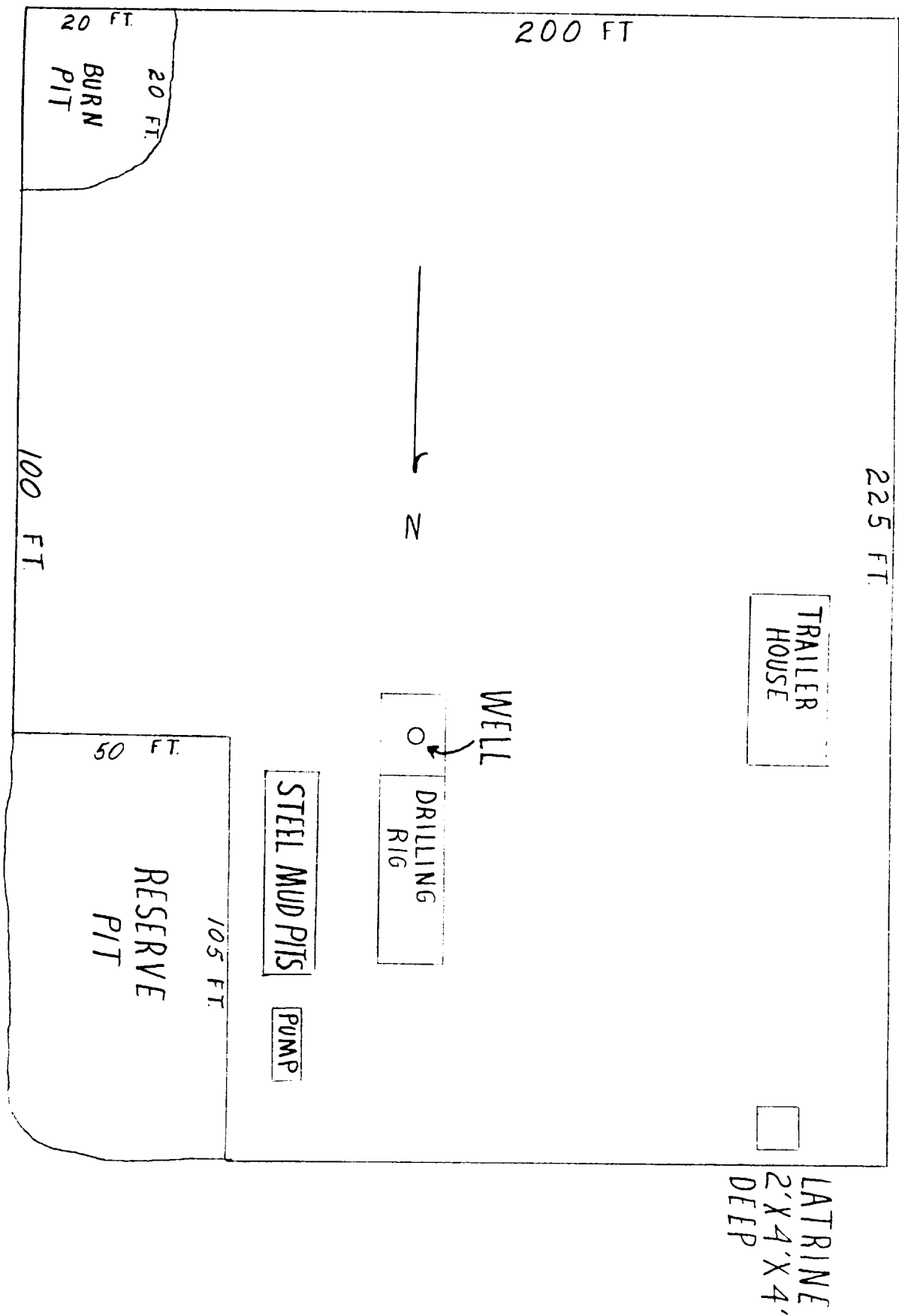
A. From 0 feet to 250 feet - Natural Mud
B. From 250 feet to 4150 feet - Permaloid Non dispersed mud containing 167 sx of Gel, 67 sx of Permaloid and 10 sx of C.M.C. Mud wt. will be held between 8.2# and 8.8#.
C. From 4150 feet to 7950 feet - Air
7. The auxiliary equipment to be used will be floats at the bit and a sub on the floor with a full opening valve to be stabbed into the drill pipe when the Kelly is not in the string.
8. This well is in an area which is almost completely developed; therefore, we will not have a testing and coring program. The logging program will be as follows:

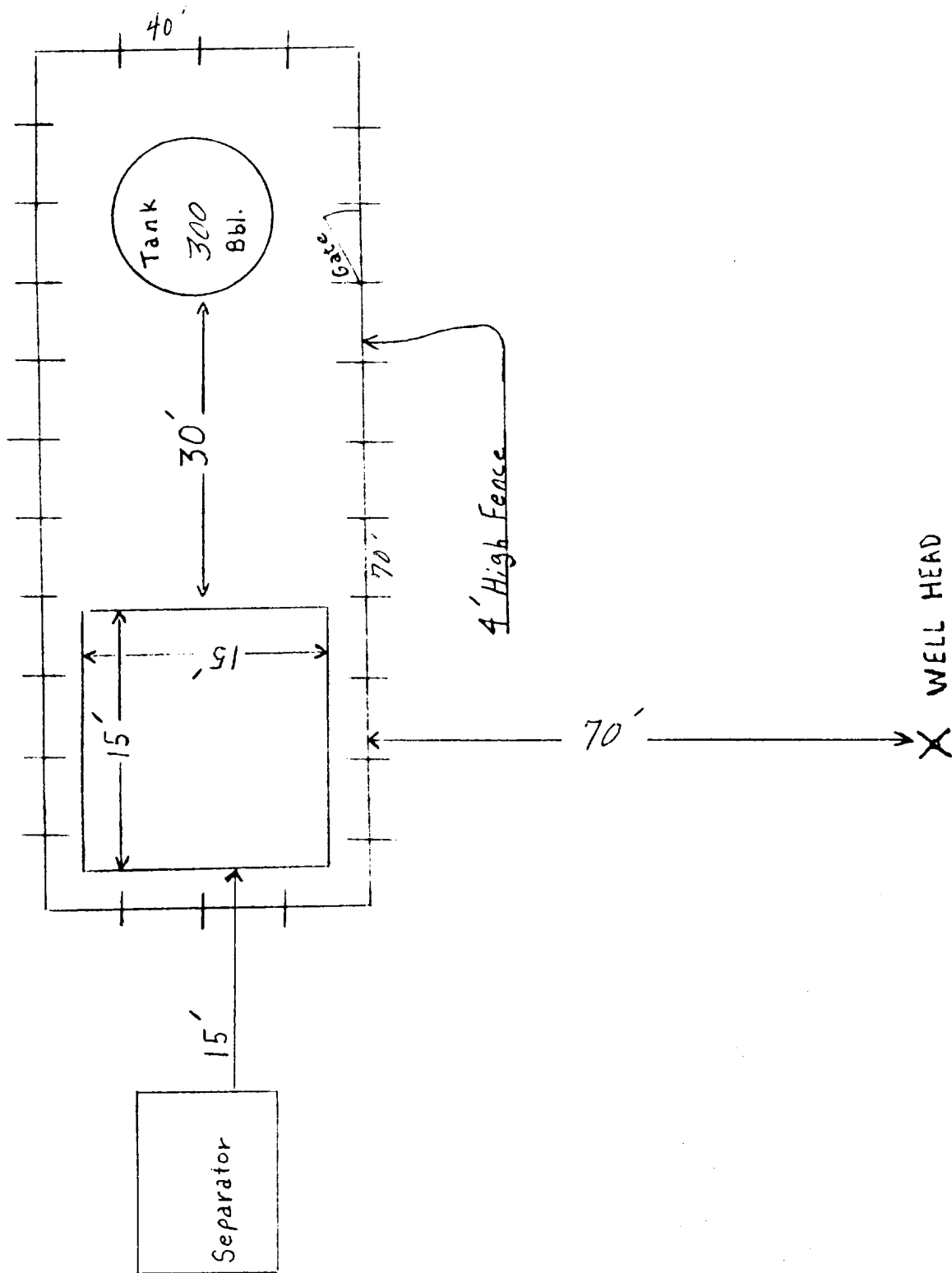
A. E.S. Induction
B. Gamma Ray Density
C. Gamma Ray Correlation
D. Cement Bond or Temperature
9. There are no abnormal pressures, temperatures or hydrogen sulfide problems expected in this highly developed area.
10. The anticipated starting date for this well is August 1, 1978.



JICARILLA "E" NO. 15

1645 Feet from the South line and 830 feet from the West line of
Section 16, Township 26 North, Range 4 West, N.M.P.M., Rio Arriba
County, New Mexico.

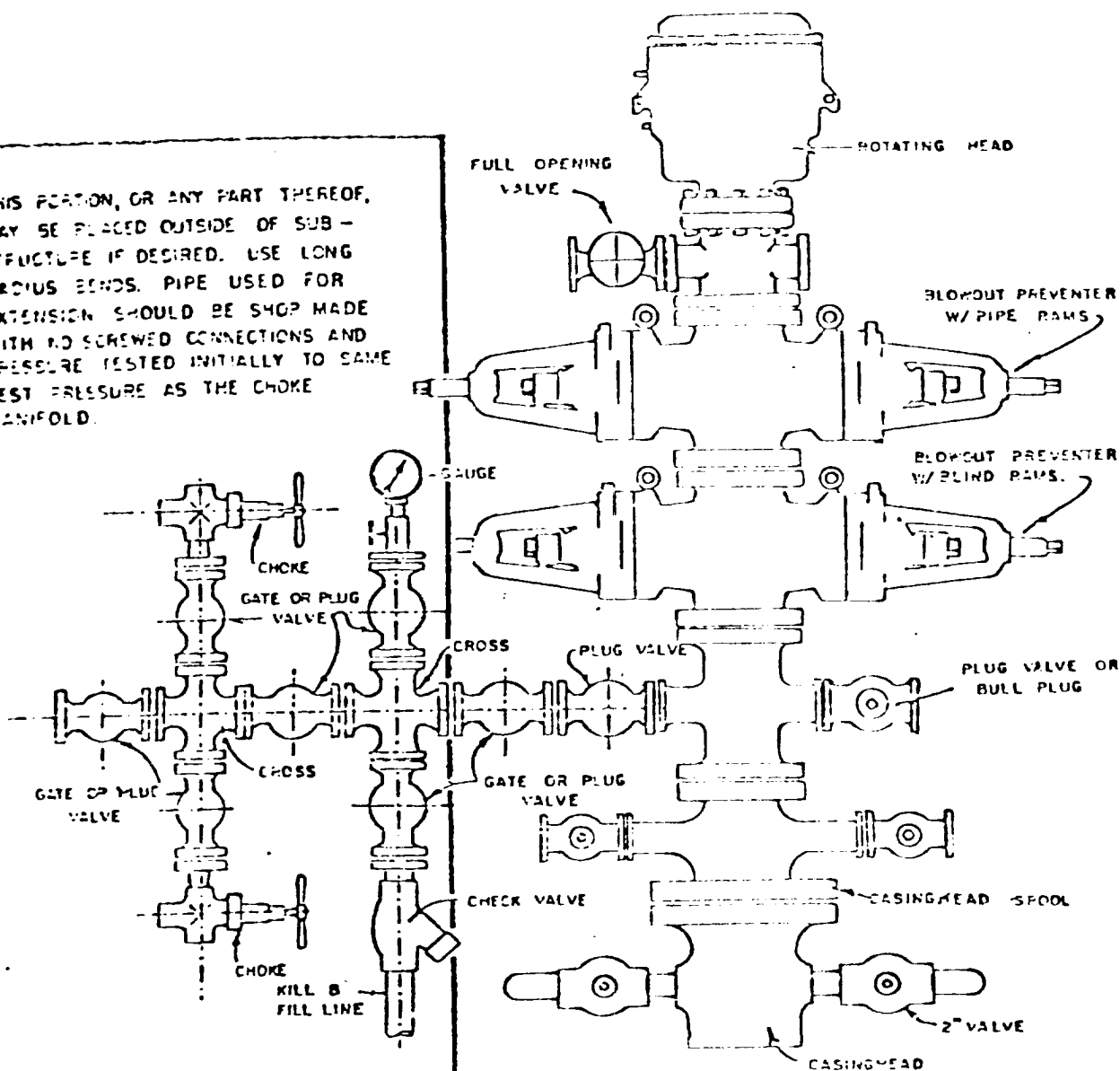




Blowout Preventer will be tested daily and prior to drilling out with the results to be logged on the drillers report.

The B.O.P. and all valve and fittings are rated at 3000 psi working pressure, and hydraulically operated

THIS PORTION, OR ANY PART THEREOF, MAY BE PLACED OUTSIDE OF SUB-STRUCTURE IF DESIRED. USE LONG RADIUS BENDS. PIPE USED FOR EXTENSION SHOULD BE SHOP MADE WITH NO SCREWED CONNECTIONS AND PRESSURE TESTED INITIALLY TO SAME TEST PRESSURE AS THE CHOKE MANIFOLD.

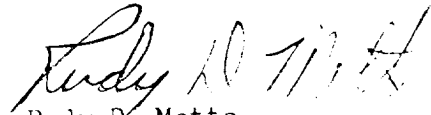


BLOWOUT PREVENTER HOOKUP

SUPRON ENERGY CORPORATION
POST OFFICE BOX 808
FARMINGTON, NEW MEXICO 87401

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 SUPRON ENERGY CORPORATION and its contractors subcontractors in conformity with this plan and the terms and conditions under which it is approved.

SUPRON ENERGY CORPORATION

A handwritten signature in dark ink, appearing to read "Rudy D. Motto", is written over the printed name.

Rudy D. Motto
Area Superintendent
Phone: 325-3587

OIL CONSERVATION COMMISSION
by the DISTRICT

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

Carl Elroy

DATE 2-15-79

RE: Proposed MC ✓
Proposed DHC _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated 1-18-79
for the Supron Energy Corp. Jicarilla E #15
Operator Lease and Well No. Unit, S-T-R
L-16-26N-4W
and my recommendations are as follows:

Approve

Yours very truly,

AK Kendrick

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
APPLICATION FOR MULTIPLE COMPLETION

Form C-107
5-1-f1

Operator SUPRON ENERGY CORPORATION		County Rio Arriba	Date 1-18-79
Address P.O. Box 808 Farmington, New Mexico 87401		Lease Jicarilla "E"	Well No. 15
Location of Well L	Unit 16	Township 26 N	Range 4 W

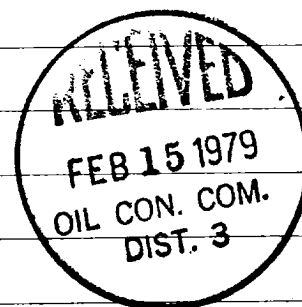
1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES X NO
2. If answer is yes, identify one such instance: Order No. MC - 1802; Operator Lease, and Well No.: SUPRON ENERGY CORP. Jicarilla "E" No. 8

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Wild Horse Gallup		Basin Dakota
b. Top and Bottom of Pay Section (Perforations)	7113' to 7207'		7621' to 7773'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

4. The following are attached. (Please check YES or NO)

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.
- | | | |
|---------------------------------|--------------------------|-------------------------------------|
| Amoco Production Company | 501 Airport Drive | Farmington, New Mexico 87401 |
|---------------------------------|--------------------------|-------------------------------------|



6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO . If answer is yes, give date of such notification January 18, 1979.

CERTIFICATE: I, the undersigned, state that I am the Area Superintendent of the Supron Energy Corporation (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Rudy D. Motto Signature

*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of the pools, the application must be filed simultaneously with this application.

SUPRON ENERGY CORPORATION

JICARILLA "E" NO. 15
1645'/S line & 830'/W line
Sec. 16, T-26N, R-4W, N.M.P.M.
Rio Arriba County, N. Mex.

Surface Csg. 10-3/4", 32.75# H-40
set @ 220' w/225 sx cmt.

Intermediate Csg. 7-5/8", 26.40#, K-55
set @ 3650' w/200 sx

2-1/16" I.J. Tbg. Landed @ 7106'

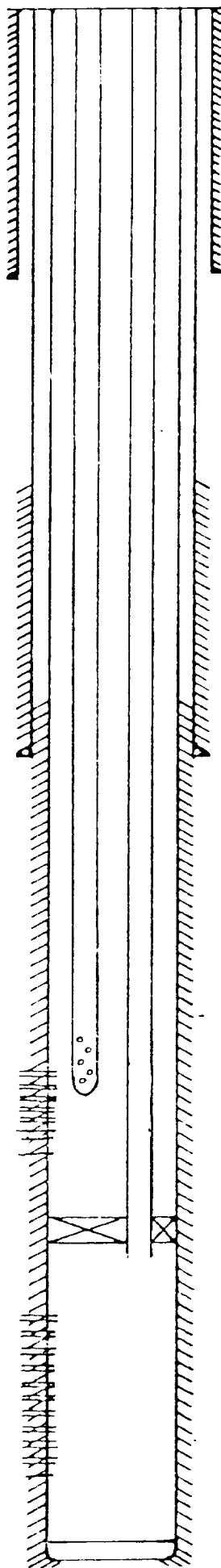
Perforate 9 Size 0.42" Holes from
7113' to 7207'

Perf. 18 Size 0.42" Holes from
7621' to 7773'

P.B.T.D. 7815'

Liner 5-1/2", 15.5# K-55 set @ 7818'
w/495 sx

T.D. 7824



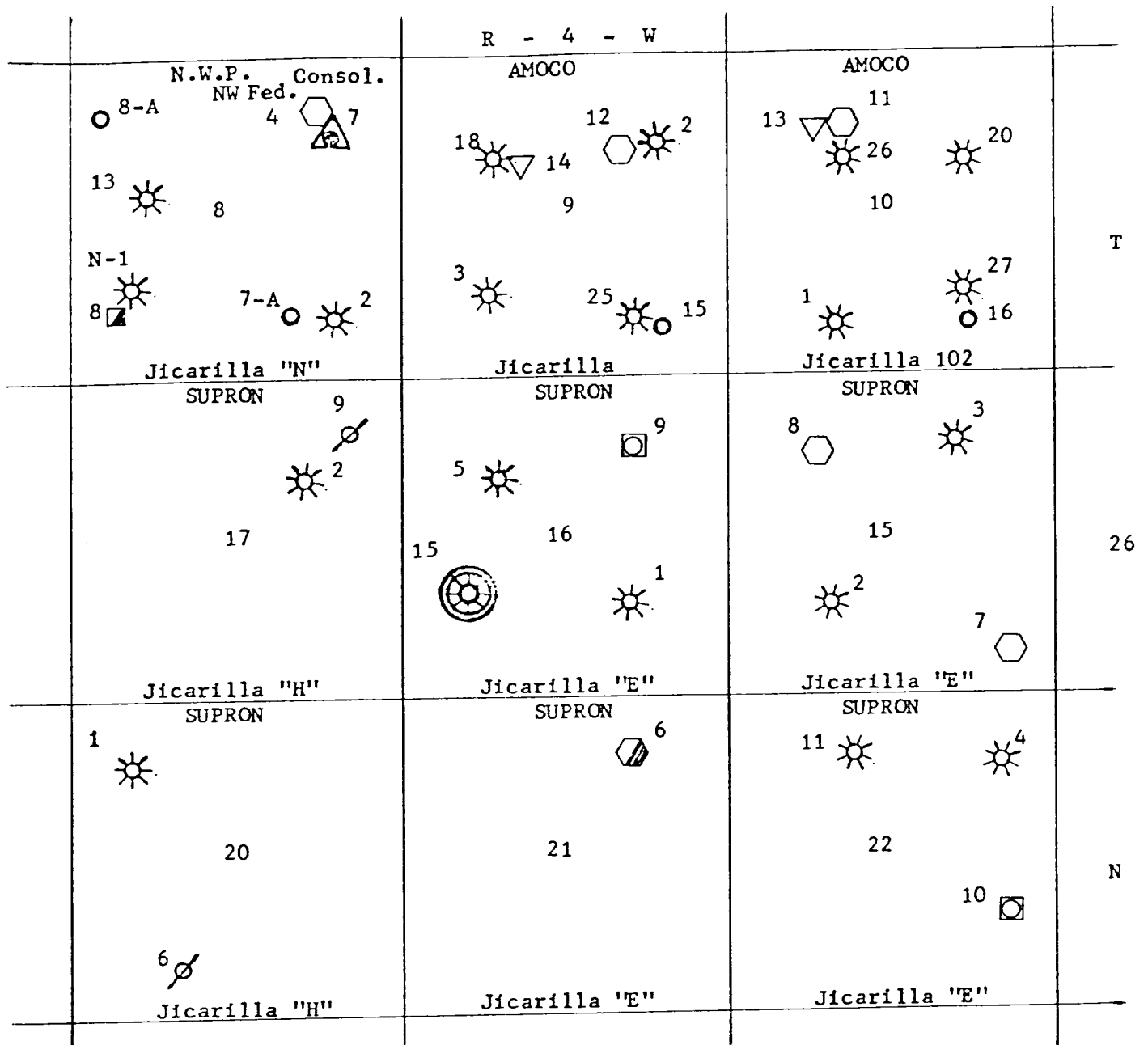
2-1/16" I.J. Tbg. set @ 7582'

Baker 5-1/2" Model "D" Production
Packer set @ 7582'

SUPRON ENERGY CORPORATION

WELL: JICARILLA "E" NO. 15

LOCATION: 1645 Feet from the South line and 830 feet from the West line of Section 16, Township 26 North, Range 4 West, N.M.P.M., Rio Arriba County, New Mexico.



Proposed



Pictured Cliffs



Pictured Cliffs - Mesaverde



Pictured Cliffs - Dakota



Dakota



Dakota - Gallup



Mesaverde



Mesaverde - Dakota



Gallup



Abandoned

NEW MEXICO OIL CONSERVATION DIVISION
SANTA FE, NEW MEXICO
Packer-Setting Affidavit

STATE OF New Mexico)
COUNTY OF San Juan -)

Gene Longacre being first dully sworn according to law,
upon his oath deposes and says:

That he is of lawful age and has full knowledge of the facts herein below set out.

That he is employed by Baker Packers in the capacity
of Oil Field Service Engineer and as such as its authorized agent.

That on January 14, 1979, he personally supervised the setting
of a Model "D" 5-1/2" in Supron Energy Corporation's
(Make and Type of Packer)
Jicarilla "E" Well No. 15, located in Unit Letter
L, Section 16, Township 26 North, Range 4 West, N.M.P.M.
Rio Arriba, County, New Mexico.

That said packer was set at a subsurface depth of 7582 feet,
said depth measurement having been furnished by Go Wireline.

That the purpose of setting this packer was to effect a seal in the annular
space between the two strings of pipe where the packer was set so as to prevent the
comingling, within the well-bore, of fluids produced from a stratum below the
packer with fluids produced from a stratum above the packer. That this packer was
properly set and that it did, when set, effectively and absolutely seal off the
annular space between the two strings of pipe where it was set in such manner as
to prevent any movement of fluids across the packer.

Baker Packers
Company

Original Signed by:

Gene Longacre
Gene Longacre (Its Agent)

Subscribed and sworn to before me this the 8th day of February AD,
1979

Edith G. Stewart
Notary Public

My Commission Expires August 25, 1980

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
RESEARCH REPORT

RESEARCH REPORT NO. 100

RESEARCH REPORT NO. 100

RESEARCH REPORT NO. 100

RESEARCH REPORT NO. 100

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DEVIATION TABULATION REPORT

SUPRON ENERGY CORPORATION	Jicarilla "E"	15	16	26N	4W
Operator	Lease	Well No.	Sec.	Twp.	Rge.

<u>DEPTH</u>	<u>DEVIATION</u>	<u>DEPTH</u>	<u>DEVIATION</u>
220 Ft.	1/4°	4438 Ft.	2-3/4°
872 Ft.	3/4°	5015 Ft.	3°
1366 Ft.	1°	5569 Ft.	3-1/4°
1963 Ft.	1-3/4°	5970 Ft.	3°
2434 Ft.	2°	6499 Ft.	3°
2900 Ft.	2-1/2°	6957 Ft.	3-1/4°
3398 Ft.	2-1/4°	7478 Ft.	3-1/2°
4085 Ft.	2-3/4°	7810 Ft.	3-3/4°


 Area Superintendent

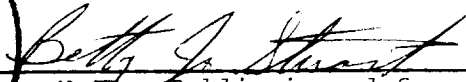
STATE OF New Mexico)
)
 COUNTY OF San Juan)

On this 14th day of February, 1979, before

as personally appeared Rudy D. Motto, to me known to be the person (s) described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

IN WITNESS WHEREOF, I have set my hand and seal of office on the 14th day of February, 1979.




 Notary Public in and for
 San Juan County, New Mexico

My Commission Expires:

August 25, 1980

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
 Revised 9-1-75

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special						Test Date 2-5-79	
Company SUPRON ENERGY CORPORATION				Connection Gas Company of New Mexico			
Pool Basin				Formation Dakota		Unit	
Completion Date 1-17-79		Total Depth 7824		Plug Back TD 7815		Elevation 6730 Gr.	
Csg. Size 7.625 5.500		Wt. 26.40 15.50		Set At 3650 7818		Perforations: From 7621 To 7773	
Thg. Size 2.0625		Wt. 3.25		Set At 7582		Perforations: From ----- To -----	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Dual - Gas - Gas						Packer Set At 7582	
Producing Thru Tubing L 7568		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12	
H		G _g 0.700		% CO ₂		% H ₂ S	
Prover		Meter Run		Taps		County Rio Arriba	
State New Mexico							

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	2"		3/4"				1866				7 days
1.							57	58°			3 hours
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.3650		69	1.0019	0.9258	1.000	791
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

NO.	P _t	P _w	P _w ²	P _t ² - P _w ²	(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 1.0114$	(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1.0085$
1			39,853	3,487,031		
2						
3						
4						
5						

Absolute Open Flow 798 Mcfd @ 15.025 Angle of Slope 0.75

(Remarks) _____

Approved By Commission:	Conducted By: John C. Rector	Calculated By: Kenneth E. Roddy	Checked By:
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