Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-045-23795

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: SF-078056

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐ PLUG BACK ☐

7. UNIT AGREEMENT NAME:

b. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ OTHER — SINGLE ZONE ☒ MULTIPLE ZONE ☐

8. FARM OR LEASE NAME: Federal "C"

2. NAME OF OPERATOR: Hixon Development Company

9. WELL NO.: 9

3. ADDRESS OF OPERATOR: P.O. Box 2810, Farmington, New Mexico 87401

10. FIELD AND POOL, OR WILDCAT: WAW-Fruitland-PC Ext.

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1750' FNL, 1850' FWL - Section 5-T25N-R12W
At proposed prod. zone:

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 5, T25N-R12W

F

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 25 miles south of Farmington

12. COUNTY OR PARISH: San Juan — 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 790'

16. NO. OF ACRES IN LEASE:

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: 1325'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6159' GLE

22. APPROX. DATE WORK WILL START*: October 15, 1979

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7"	20#	90'	75 sacks
5"	2-7/8"	6.5#	1325'	200 sacks

It is proposed to drill a 4-3/4" slimhole to test the Pictured Cliffs formation. The hole will be drilled with a portable rotary rig using mud. The well will be evaluated with open hole resistivity and porosity logs prior setting casing.

gas is dedicated

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.

SIGNED [signature] TITLE Petroleum Engineer DATE August 31, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

SEP 19 1979
OIL CON. COM.
DIST. 3

*See Instructions On Reverse Side

NMOCC

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
Hixon Development Company	Federal "C"	9

Unit Letter	Section	Township	Range	County
F	5	25 North	12 West	San Juan

Actual Footage Location of Well: 1750 feet from the North line and 1850 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6159	Fruitland-Pictured Cliffs	WAW-Fruitland-PC Ext.	160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

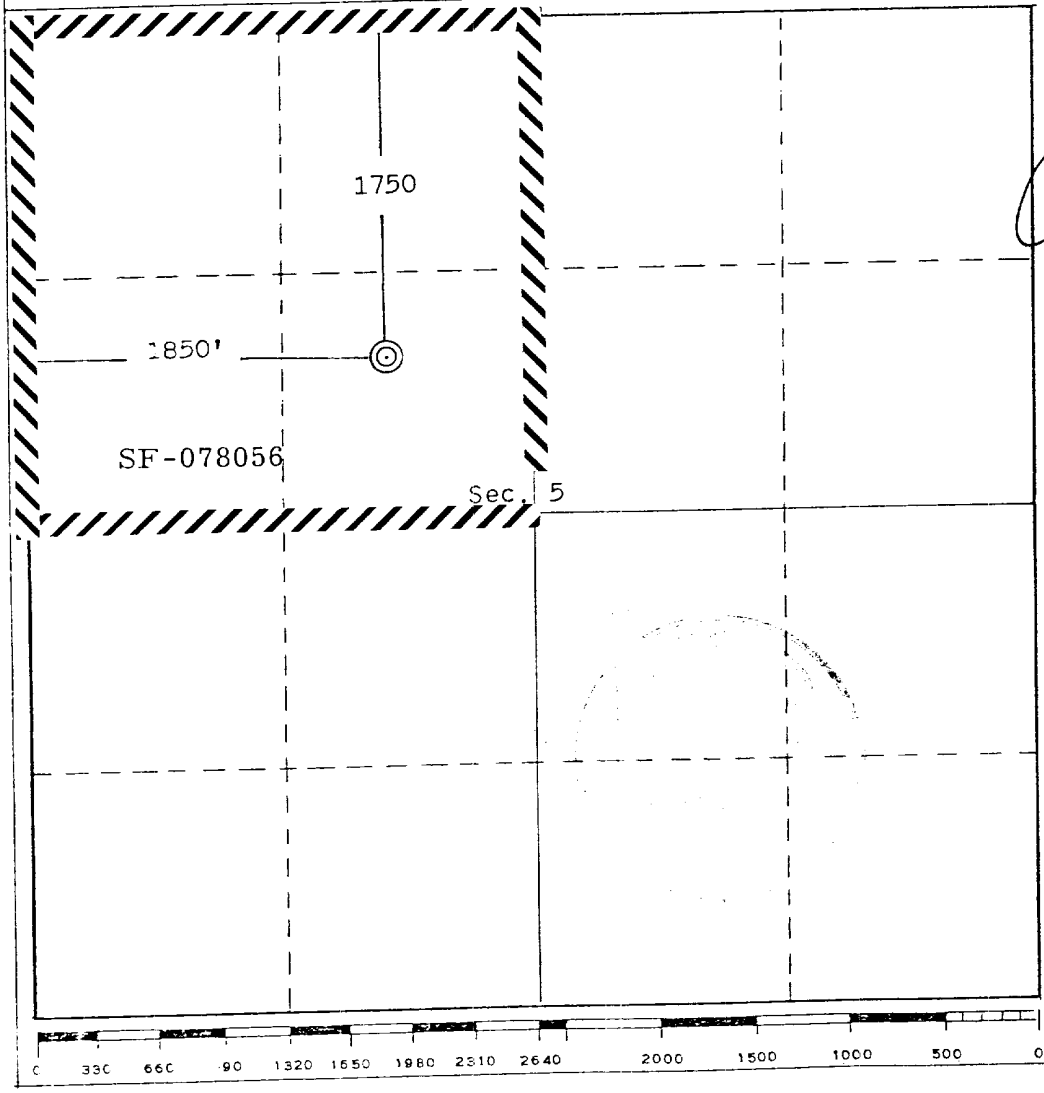
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling. or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Aldrich L. Kuchera

Position: Petroleum Engineer

Company: Hixon Development Compar

Date: August 30, 1979

EDGAR L. RISENHOOVER NEW MEXICO REGISTERED LAND SURVEYOR

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.

Date Surveyed: August 29, 1979

Registered Professional Engineer and/or Land Surveyor

Edgar L. Risenhoover

Certificate No. 5979

Edgar L. Risenhoover, L.S.

Application for Permit to Drill
Hixon Development Company
Federal "C" Well No. 9
1750' FNL, 1850' FWL
NW/4 of Section 5, T25N, R12W
San Juan County, New Mexico

Recap of NTL-6 13-Point Outline is as follows:

1. Existing Roads - Refer to attached topographic map. The proposed well site is located inside an existing 25 year old oil field. The field has an extensive lease road system tied to State Highway 371 south of Farmington.

2. Planned Access Roads - Construction of an access road will not be necessary. Per the attached map, an access road already exists to this well site.

3. Location of Existing Wells - Refer to attached map.

4. Location of Tank Batteries, Production Facilities, etc. - The proposed well is located within an extensive oil and gas flow-line and water injection system.

5. Location and Type of Water Supply - Will not be necessary. Any water used for workover purposes will be hauled in from a source well in Section 5, or from Farmington.

6. Source of Construction Materials - None will be used.

7. Methods for Handling Waste Disposal - Any waste materials incurred while drilling will be buried in the mud pits.

8. Ancillary Facilities - Will use existing Central Bisti Unit facilities.

9. Well Site Layout - Refer to plat attached.

10. Plans for Restoration of Surface - Area in the vicinity of well site is primarily sand. Very little of the well site area will be disturbed.

11. Other Information - Refer to Archaeological Report to be submitted to USGS.

12. Leasee's or Operator's Representative -

Aldrich L. Kuchera

Telephone	325-6984	Office
	325-3448	Home
	325-1873	Car - Unit #675

13. Certification - See Attached.

Application for Permit to Drill
Hixon Development Company
Federal "C" Well No. 9
1750' FNL, 1850' FWL
NW/4 of Section 5, T25N, R12W
San Juan County, New Mexico

Other NTL-6 Pertinent Data is as follows:

1. Estimated Log Tops:

Surface	Ojo Alamo
Ojo Alamo	Surface
Kirtland	100'
Fruitland	680'
Pictured Cliffs	1100'
Lewis	1300'

2. Estimated depths of water, oil and gas:

Fresh Water - 0-60' (may not be present because the Ojo Alamo outcrops at this location). Surface casing hole drilling in this area using air will dust indicating limited if any fresh water.

Gas Sands - 100' to TD. Gas sands and salt water are dispersed throughout this interval.

3. Weight and type of Mud to be Used -

Surface - 0-90'; drill with air. Should water be encountered an Aquagel/lime slurry will be mixed to a 40-50 sec/gt viscosity.

Production Hole - A Dextrid/Cellex low solids mud or equivalent will be used. Any hardness will be treated with soda ash. Mud weight and drilled solids will be controlled. Mud properties will be as follows:

Mud Weight - 8.4 - 8.8 # / gal
Viscosity - 34 - 45 sec/quart
Plastic Viscosity - 4 - 8 cps
Yield Value - 3-6 #/100 sq. ft.
Fluid Loss - 8 - 12 cc's / API
pH - 8.3 - 8.5
Solids Content - 5-1/2% maximum
Annular Velocity - 120 FPM

Note: Bottom hole pressure gradient is 3.40#/gallon. Fracture gradient is 19.2#/gallon. We do not anticipate any drilling problems.

4. Open Hole Logs - Induction Electric Survey and Compensated Caliper Gamma Ray Neutron - Density.

5. Cased Hole Logs - Gamma Ray - CCL and Cement Bond Log.

6. Casing Program - Surface casing will be 90' of 7" 20# J-55, 8rd, ST&C, Range 3, ST&C, Smls, New Casing.

   Production Casing will be 1325' of 2-7/8" 6.5# J-55, 8rd, EUE, Range 1, Smls, New Casing.

7. Cementing Program - Surface casing will be cemented to surface as follows: (1) break circulation with water (2) pump 75 sacks Class B cement slurry w/2% CaCl (3) Drop wooden cement wiper plug and displace to casing shoe (4) WOC 12 hours.

   Production casing will be cemented to surface as follows: (1) break circulation with mud (2) pump 20 bbl C-100 chemical wash (3) mix and pump 185 cubic feet (150 sacks) Litepoz 3 cement slurry weighing 13.5#/gal and containing 2% gel, 2% CaCl, 1/4#/sack D-29 cellophane, 10#/sack Gilsonite (4) follow with 59 cubic feet Class B cement slurry with 2% CaCl (5) flush lines, drop Omega plug and displace plug with acetic acid and 2% KCl water (6) latch in plug with 2000 psi and WOC 48 hours or to a compressive strength of 1000 psi.

8. Drilling Hazards - are minimal in this area. High pressure zones, high temperatures, sour gas or other abnormal deviations are not expected.

9. Duration of Drilling Activity - will be about 15 days from spud date to completion.

10. Pressure Control Equipment - Will use a standard single ram BOP with stripperhead. This will allow for positive pressure control with pipe in or out of hole.

11. Casing Pressure Testing - Surface casing will be tested for 30 minutes to 500 psi before drilling out shoe. Production casing will be tested to 2000 psi after Omega plug latches in both surface and production casing will be factory tested to API specification and will be new.

12. Plugging & Abandoning - In the event the well is a dryhole, it will be plugged with prior USGS approval and the drill site restored in accordance with pertinent regulations.

HIXON DEVELOPMENT COMPANY
P. O. BOX 2810
FARMINGTON, NEW MEXICO 87401

CERTIFICATION

I, hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Hixon Development Company and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved.

August 28, 1979

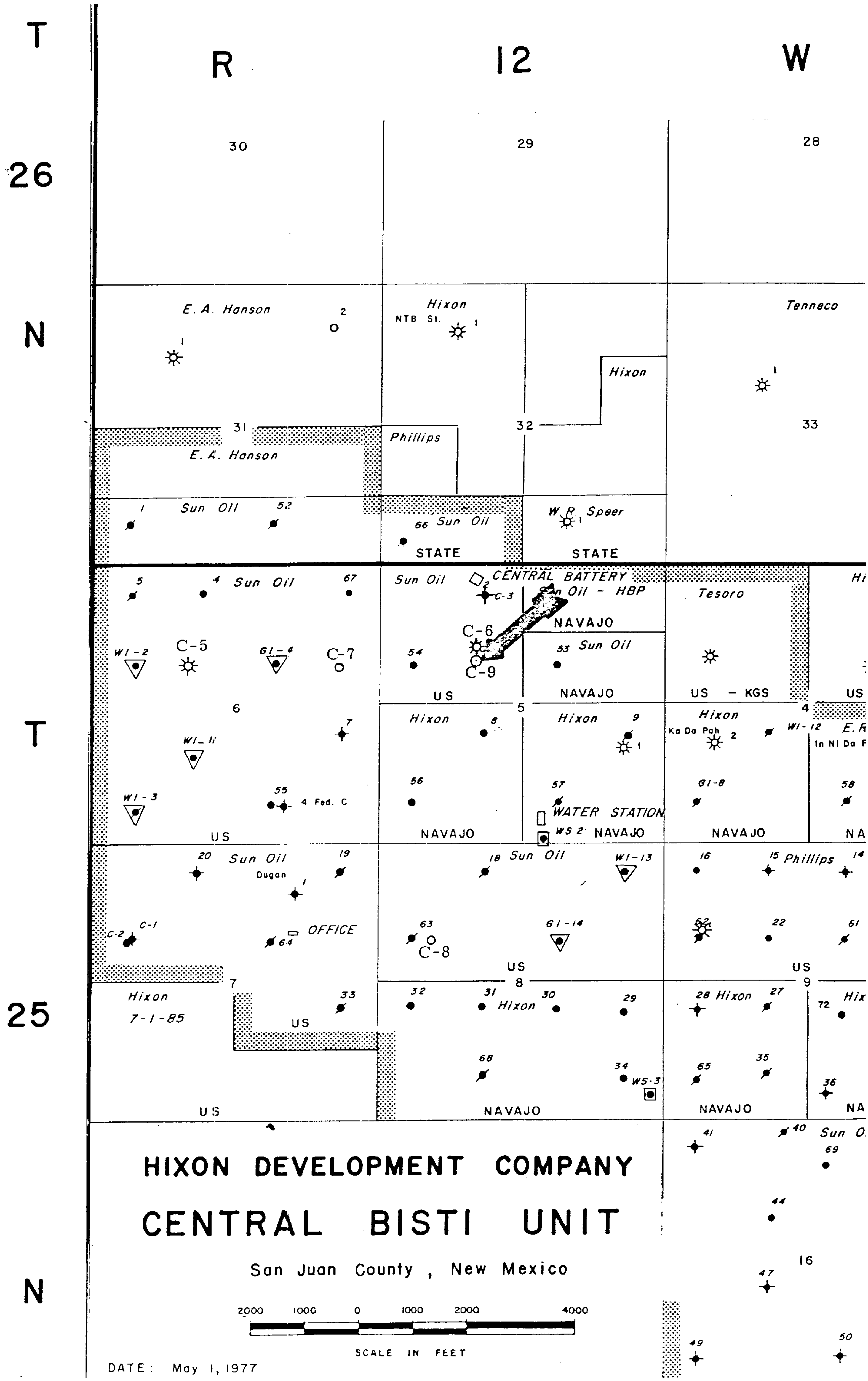
Aldrich L. Kuchera
Vice President

Subscribed and Sworn to before me this 28th day of August 1979.

My commission expires 7-25-83.

Cindy Duncan - Notary Public

OFFICIAL SEAL
CINDY DUNCAN
NOTARY PUBLIC - NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires: 7-25-83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E. A. Hanson
Hixon
NTB St.
Tenneco
Hixon
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32
33
Phillips
E. A. Hanson
Sun Oil
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STATE
W. R. Speer
STATE
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CENTRAL BATTERY
Sun Oil - HBP
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C-5
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53 Sun Oil
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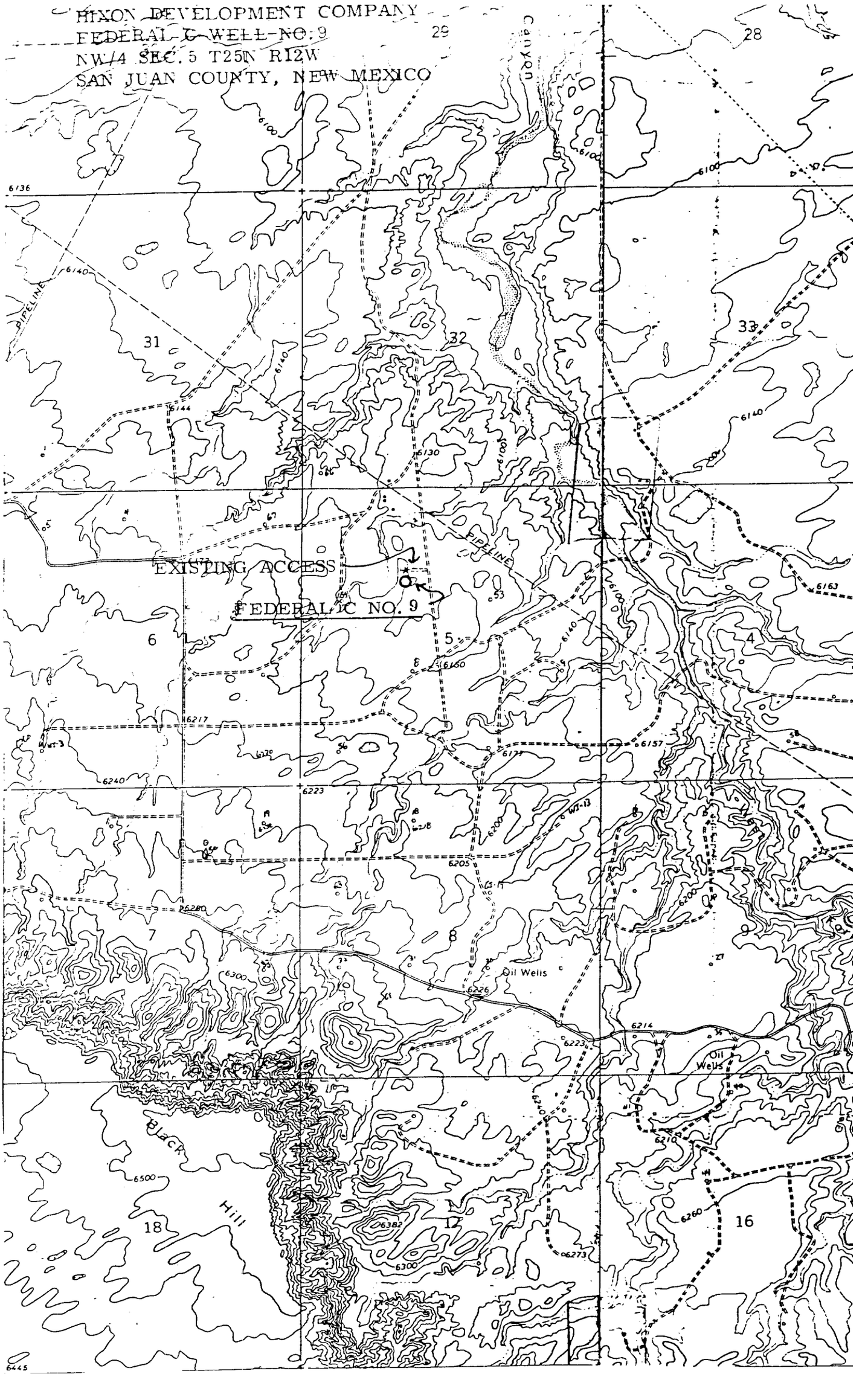
HIXON DEVELOPMENT COMPANY
CENTRAL BISTI UNIT
San Juan County, New Mexico
2000 1000 0 1000 2000 4000
SCALE IN FEET
DATE: May 1, 1977


HIXON DEVELOPMENT COMPANY
FEDERAL C WELL NO. 9
NW/4 SEC. 5 T25N R12W
SAN JUAN COUNTY, NEW MEXICO
EXISTING ACCESS
FEDERAL C NO. 9
PIPELINE
PIPELINE
Oil Wells
Oil Wells
BLACK
Hill
29
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PROJECT FEDERAL "C" NO. 9

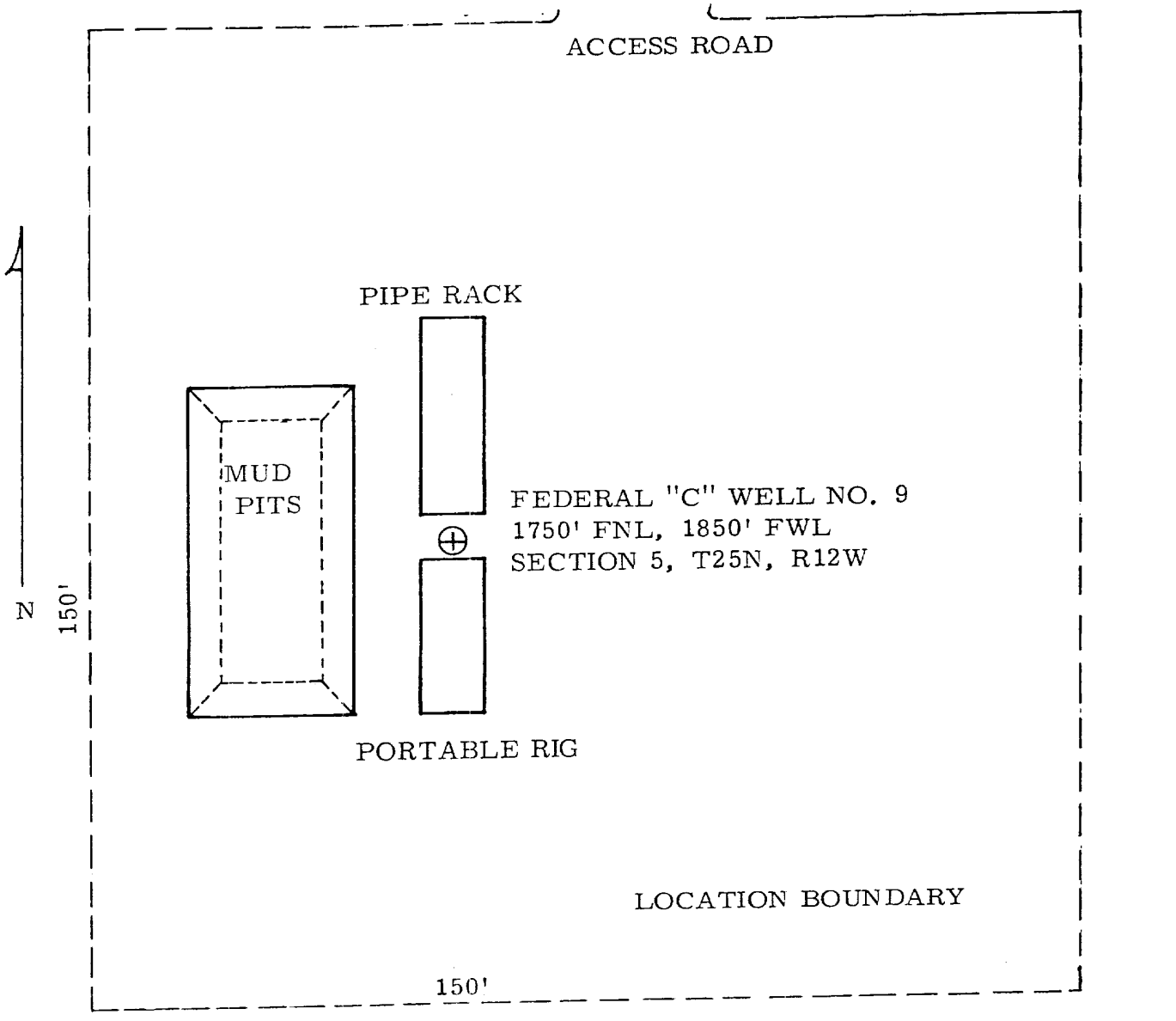
PURPOSE DRILLING LOCATION PLAT

COMPUTED BY _____

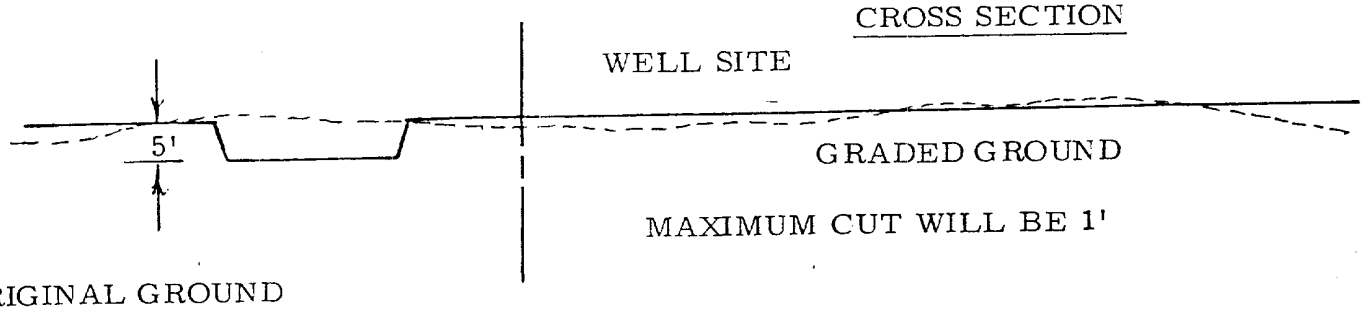
JOB NO. _____

SHEET _____ OF _____

CHECKED BY _____



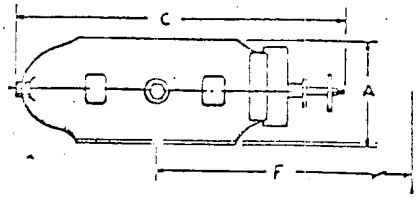
CROSS SECTION



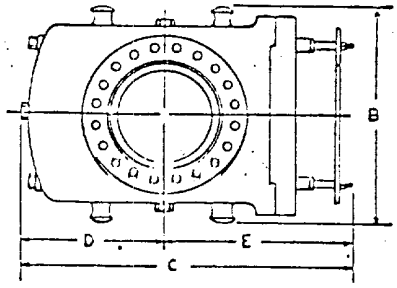
SCALE 1" = 25'

DIMENSIONAL AND ENGINEERING DATA ON SHAFFER BLOWOUT PREVENTERS

TYPE 45 MECHANICAL SINGLE BLOWOUT PREVENTER



Dimensional Elevation — Shaffer Type 45 Mechanical Single Blowout Preventer



Dimensional Plan — Shaffer Type 45 Mechanical Single Blowout Preventer

Size	Max. Service Pressure Rating, psi	Test Pressure, psi	Vertical Bore	Approx. Weight, Pounds	Ram Size	A Height	B Width	C Length	D Center To Rear	E Center To Front	F Max. Distance Needed To Change Rams
6"	3,000	6,000	7 1/16"	1,500	C.S.O. Thru 5" O.D.	14"	27 1/2"	34"	13 1/2"	20 1/2"	41 1/2"
8"	3,000	6,000	9"	2,050	C.S.O. Thru 7" O.D.	15 3/4"	29 3/4"	40"	16 3/4"	23 1/4"	49 3/4"
10"	3,000	6,000	11"	2,580	C.S.O. Thru 8 5/8" O.D.	16 3/4"	32"	42 1/4"	18 3/4"	24 1/4"	54 1/4"
12"	3,000	6,000	12 1/4"	3,345	C.S.O. Thru 10 3/4" O.D.	17 3/4"	33 1/4"	47 3/4"	21"	26 3/4"	60 1/4"
16"	2,000	3,000	15 1/4"	4,200	C.S.O. Thru 13 3/4" O.D.	17"	37"	51 3/4"	22 3/4"	29 1/4"	66 1/4"