Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-031-20604

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER Wildcat SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: James L. Ludwick

3. ADDRESS OF OPERATOR: P.O. Box 70, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FWL, 2060' FSL
At proposed prod. zone: Same

1C

5. LEASE DESIGNATION AND SERIAL NO.: NM-6999

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: IRMA

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 35, T19N, R5W

12. COUNTY OR PARISH: McKinley

13. STATE: N. M.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 30 miles SW of Cuba, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 580'

16. NO. OF ACRES IN LEASE: 1400

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: None

19. PROPOSED DEPTH: 3100' Gallup

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 6649 Gr.

22. APPROX. DATE WORK WILL START*: May 1, 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11	8-5/8	28#	100 200	100 sx Circulated
7-7/8	5-1/2	15.5#	3100	350 sx

PROPOSED PROGRAM - See Attachments

1. Set 8-5/8 surface casing and circulate cement.
2. Drill 7-7/8 hole to TD 3100, run logs.
3. Cement 5½ production casing if commercial production is indicated.
4. Selectively perforate and Sand Water Frac.
5. Or plug & abandon in accordance with USGS instructions.

Gas not dedicated.

APPROVED AS AMENDED
MAY 15 1980
JAMES F. SIMS
DISTRICT ENGINEER

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 Hoyle R. Kennedy TITLE Agent DATE 3-19-80

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

MAR 24 1980

State

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
JAMES L. LUDWICK	IRMA	1

Unit Letter	Section	Township	Range	County
K	35	19N	5W	McKinley

Actual Footage Location of Well: 2260 feet from the South line and 1980 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6649	Gallup	Wildcat	40 Acres

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

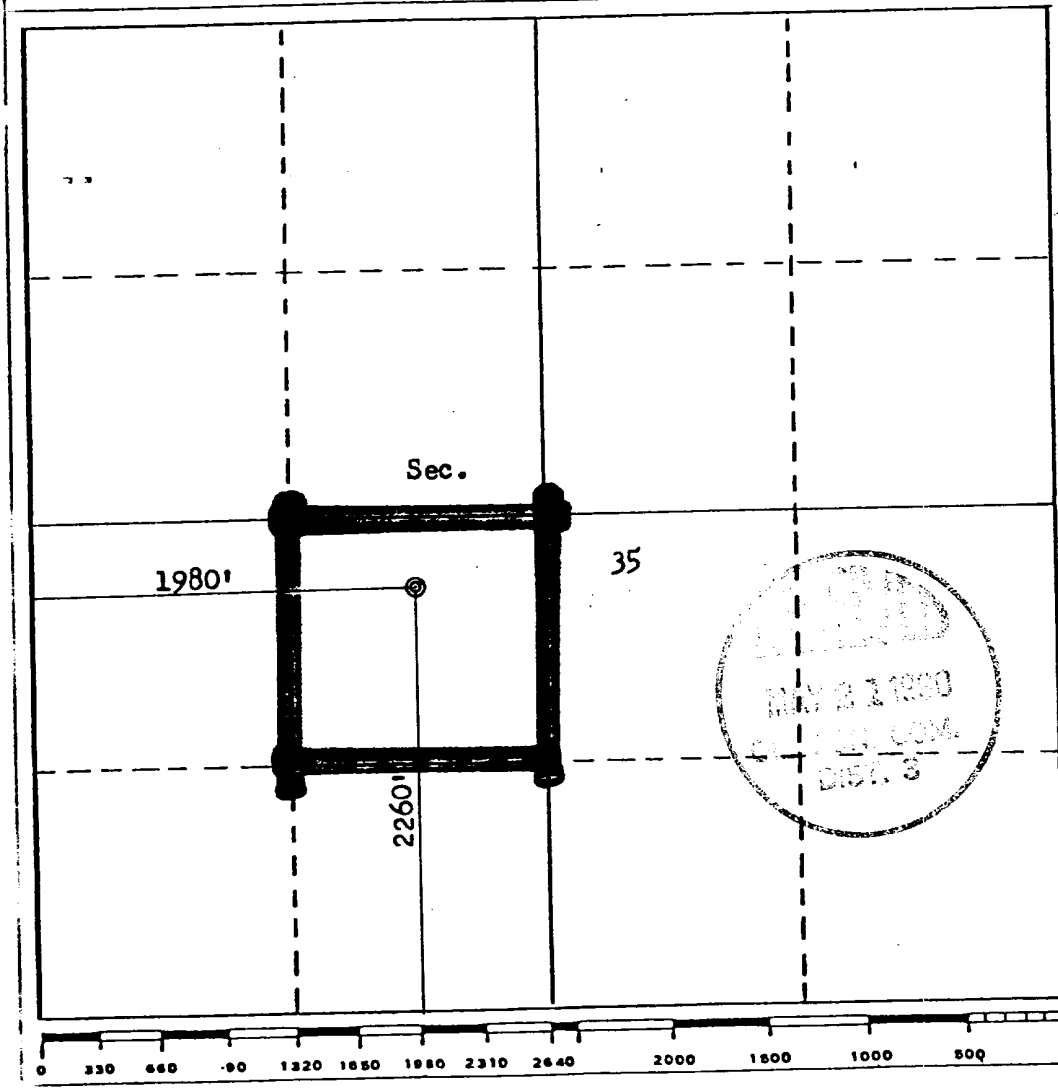
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.



RECEIVED
MAR 21 1980
OIL CON. COM.
DIST. 3

CERTIFICATION

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

Claude C. Kennedy

Name: Claude C. Kennedy

Position: Agent

Company: James L. Ludwick

Date: March 19, 1980

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: February 6, 1980

Registered Professional Engineer and/or Land Surveyor: Fred B. Kerr Jr.

Certificate No. 3950

REGISTERED LAND SURVEYOR
STATE OF NEW MEXICO
FRED B. KERR, JR.

JAMES L. LUDWICK

DEVELOPMENT PLAN FOR SURFACE USE

WELL: #1 IRMA

LOCATION:

1980' FWL, 2060' FSL
Section 35, T19N, R5W
McKinley County, N.M.

LEASE NUMBER:

NM - 6999

6109 DEL CAMPO PLACE, N.E.
ALBUQUERQUE, NEW MEXICO 87109

PHONE (505) 883-9624

CLAUDE C. KENNEDY
INDEPENDENT OIL AND GAS OPERATOR

March 19, 1980

SUBJECT: Surface Use Development Plan
No. 1 IRMA
Wildcat Gallup Test
NESW, Sec. 35, T19N, R5W
McKinley County, New Mexico

The subject development plan for the proposed James L. Ludwick #1 Irma is as follows:

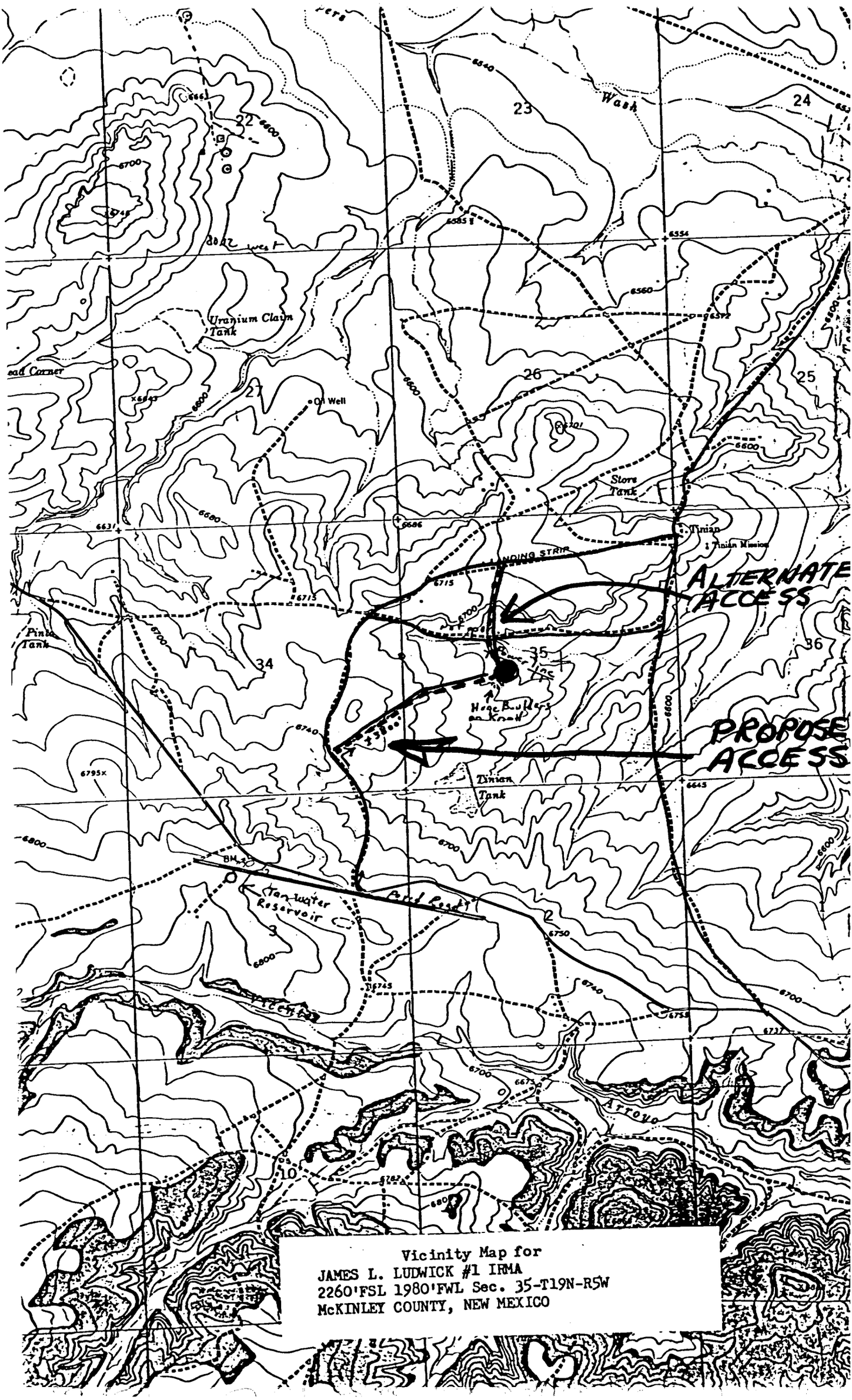
1. The attached plat shows existing roads in the area, marked green.
2. Marked in red, new access roads will be necessary, approx 3800' and alternate route can also be considered.
3. A map is attached showing offset existing wells.
4. All production facilities are to be contained within the proposed location. No other production is located within 3 miles.
5. Water for drilling and completion work will be hauled in from private owned source at Pueblo Alto Trading Post.
6. Materials necessary for the construction of a drilling pad will be obtained from the location.
7. Waste materials will be collected in the unlined earthen drilling mud pit. These materials will be buried upon completion of the well.
8. No permanent campsited or airstrips are anticipated.
9. Refer to the attached Well Site Layout plat. No major earth cuts are anticipated.
10. The proposed wellsite is located in a sandy, sparsely vegetated desert type area. There are no Indian habitations or artifacts in the immediate vicinity.
11. Please refer to the Archeological Report to be submitted to your office.
12. Company's representative is:
James Ludwick (505) 325-1079
Claude C. Kennedy (505) 883-9624

I, hereby certify that I, or persons under by 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 Ludwick and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

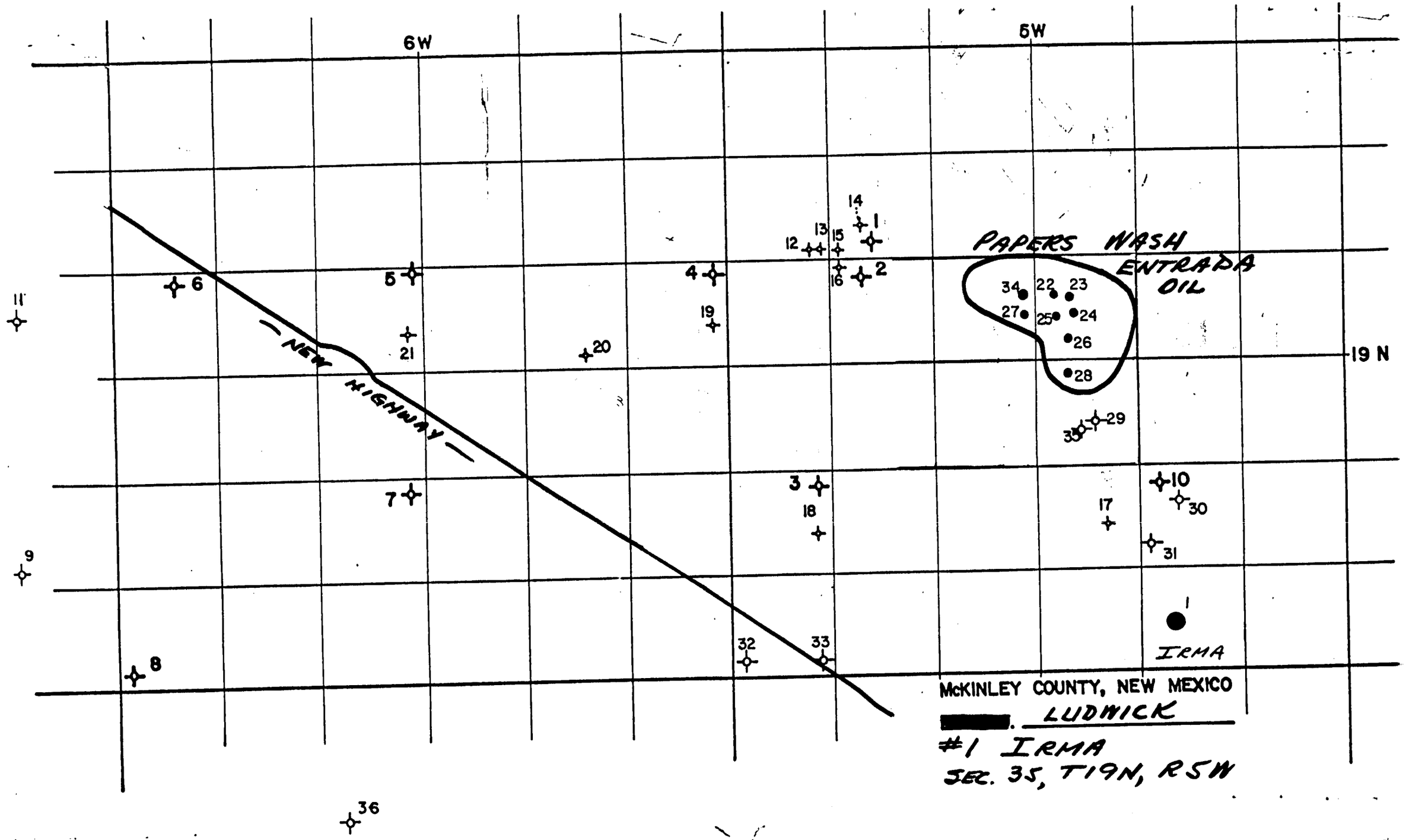
Claude C. Kennedy

March 19, 1980

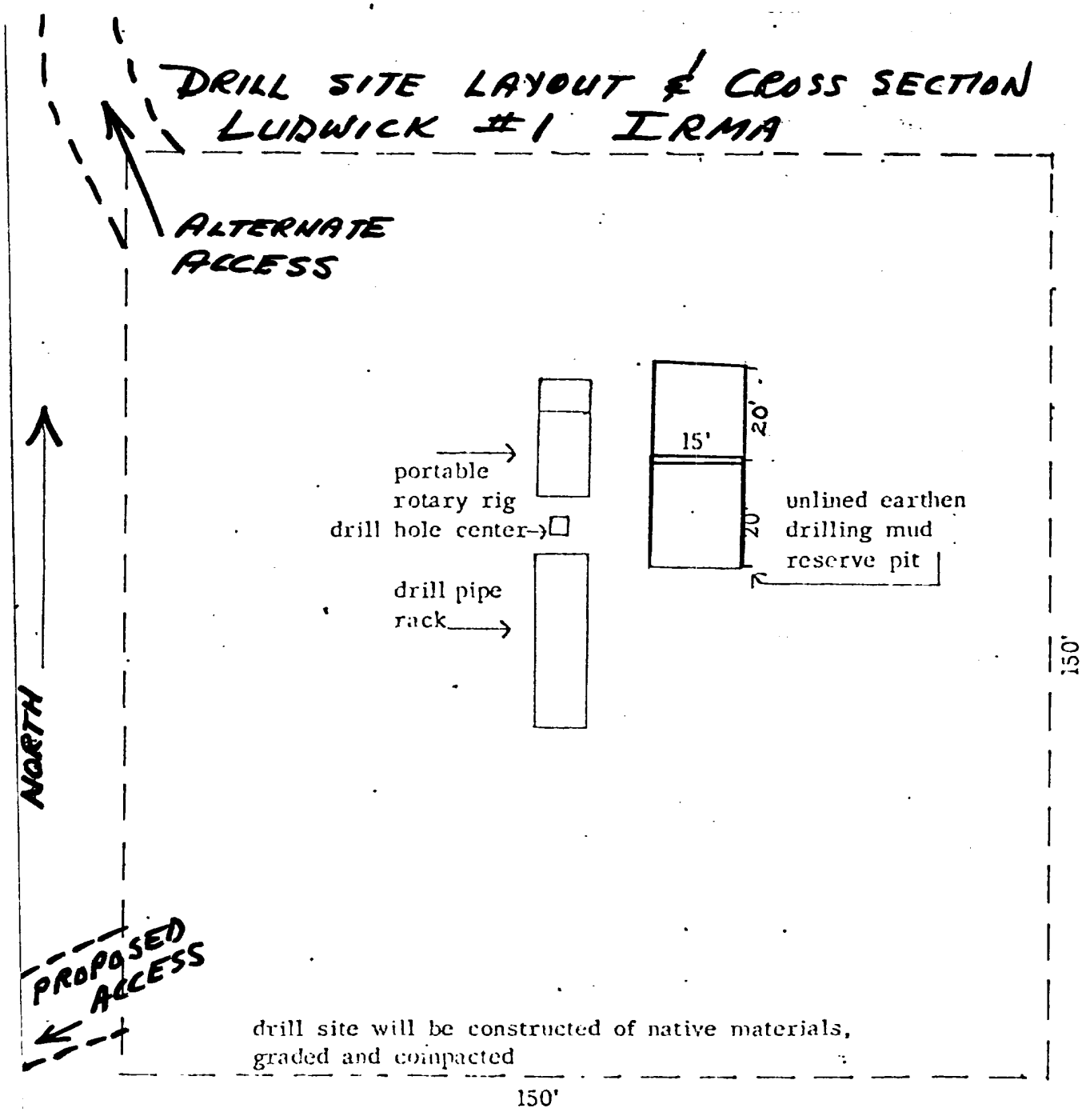
Claude C. Kennedy
6109 Del Campo Place
Albuquerque, New Mexico 87109
Telephone: (505) 883-9624

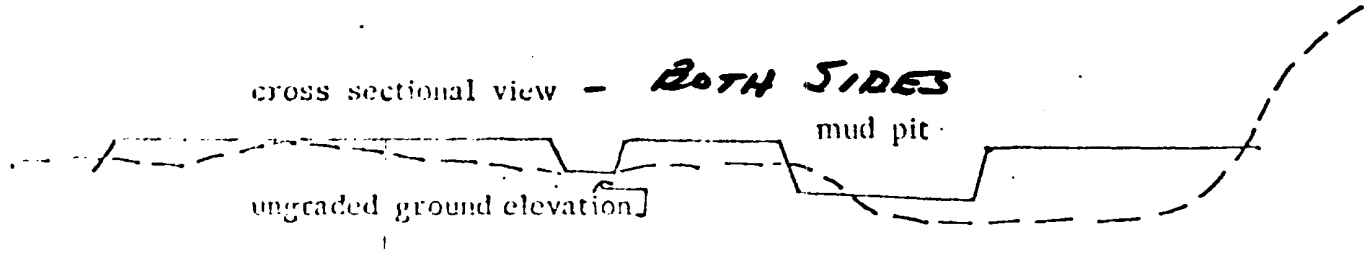


Vicinity Map for
JAMES L. LUDWICK #1 IRMA
2260'FSL 1980'FWL Sec. 35-T19N-R5W
McKINLEY COUNTY, NEW MEXICO


6W
5W
PAPERS WASH
ENTRADA
OIL
NEW HIGHWAY
19 N
11
9
36
1
2
3
4
5
6
7
8
10
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
IRMA
McKINLEY COUNTY, NEW MEXICO
LUDWICK
#1 IRMA
SEC. 35, T19N, R5W

DRILL SITE LAYOUT & CROSS SECTION
LUDWICK #1 IRMA





LEVEL ONLY - LESS THAN 1½' CUT & FILL NEEDED

JAMES L. LUDWICK

FORMATION INFORMATION AND DRILLING PRACTICE

WELL: #1 IRMA

LOCATION:

1980' FWL, 2060' FSL
Section 35, T19N, R5W
McKinley County, N.M.

LEASE NUMBER:

NM - 6999

SUPPLEMENT TO FORM 9-331C

WELL: NO. 1 IRMA

1. SURFACE FORMATION OF DRILL SITE: Mesaverde

2. ESTIMATED FORMATION TOPS:

Point Lookout	1800
Gallup	2750
TD	3050

3. WATER AND HYDROCARBON FORMATIONS:

OIL	2750

4. CASING AND CEMENT PROGRAM:

Surface: 8-5/8, 24#, K-55, new casing to be set at 100', Cement will be 100 sx, Class B plus 2 % CaCl.

Production: 5½, 15.5#, K-55, new casing to be set at 3050'. Cement will be 350 sx, approx 200 sx 50-50 pozmix slurry followed by approx 150 sx Class 'B' plus 2 % CaCl.

5. Specifications for pressure control equipment.

The attached schematic shows the type fo blow out preventer to be used while drilling. The unit will be tested to 200 psi as soon as possible after its installation on the surface pipe. Testing will be done with the rig pump. This is a manual type preventer, and its operation will be manually checked when practical.

6. Drilling fluids.

Depth	Type	Viscosity	Weight	Fluid Loss (cc)
0-100	Gel-lime	35-45	8.6-9.0	N/C
100-2600	Low-solids	29-33	8.4-8.8	15
2600-3100	Gel-chem	35-40	8.8-9.4	8

7. Auxiliary equipment.

a. bit float.
b. full opening stabbing valve to be used when kelly is not in the string.

8. Logging - Coring - Testing.

Logging: Induction Electric Log, Formation Compensated Density, Gamma Ray Caliper.

9. ABNORMAL TEMPERATURES, PRESSURE, OR HAZARDOUS CONDITIONS:

None Expected.

10. STARTING DATE:

Anticipated starting date is 5-1-1980. Approximately six days will be needed to build roads and location and drill the well to total depth. If commercial, completion will commence immediately and require ten days.

SHAFFER HYDRAULIC BLOWOUT PREVENTERS

(Patented)

TYPE LWS PREVENTERS—8", 3000 Lb. & 5000 lb.—10", 5000 Lb. 12", 3000 Lb.—13⅝", 5000 Lb.—16", 3000 Lb.

PARTS AND DIMENSIONAL ILLUSTRATIONS

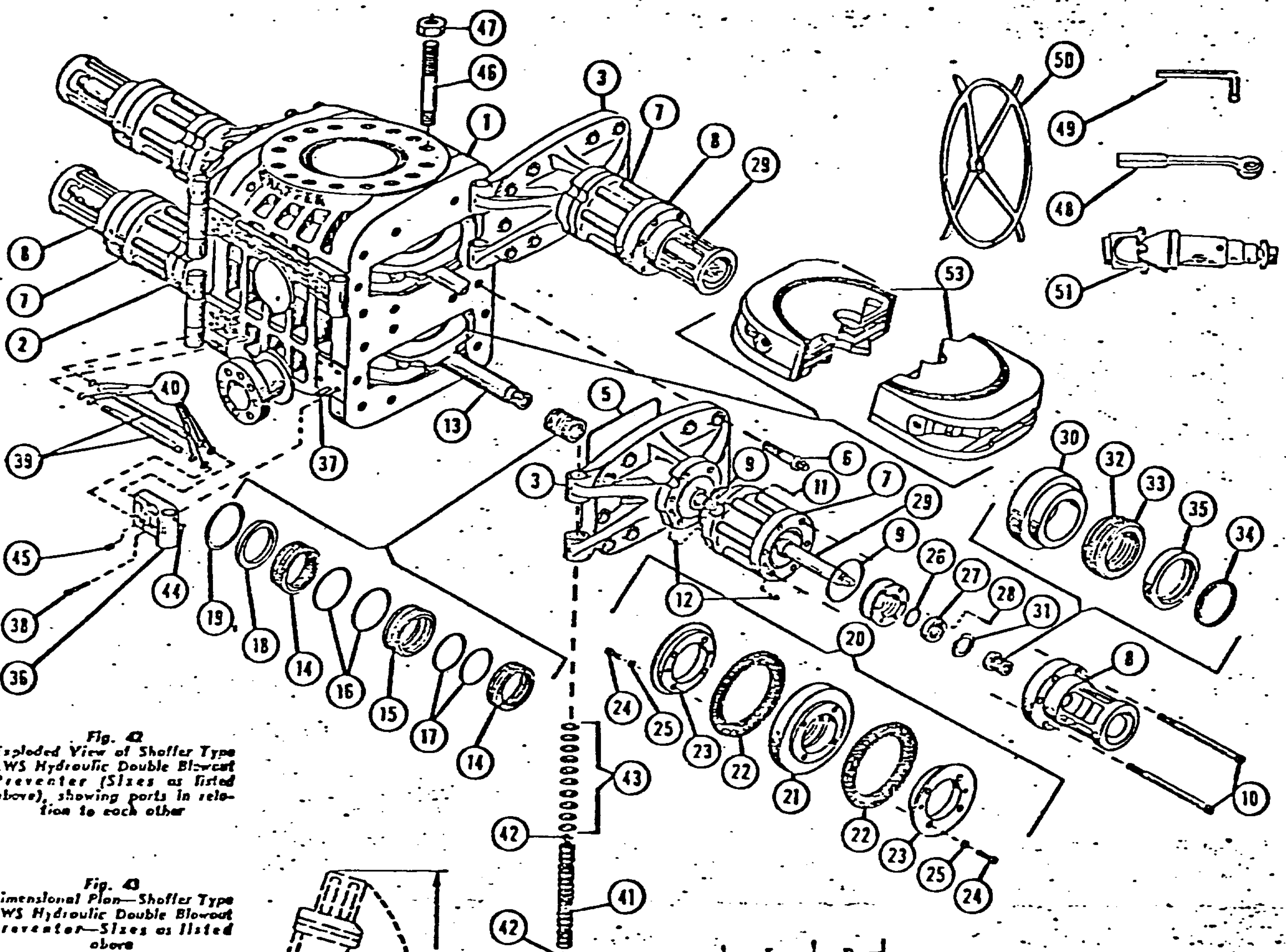


Fig. 42
Exploded View of Shaffer Type LWS Hydraulic Double Blowout Preventer (Sizes as listed above), showing parts in relation to each other

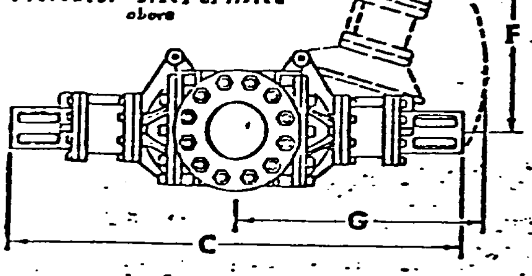


Fig. 43
Dimensional Plan—Shaffer Type LWS Hydraulic Double Blowout Preventer—Sizes as listed above

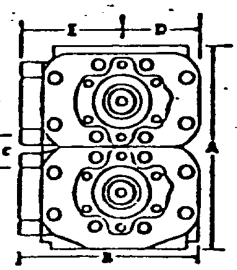


Fig. 44
Dimensional End Elevation—Shaffer Type LWS Hydraulic Double Blowout Preventer—Sizes as listed above

STANDARD ACCESSORIES

(50) 4 Hand Wheels
(48) 1 Door Wrench
(49) 1 Cylinder & Cylinder Head Wrench
(51) 4 Universal Joints

DIMENSIONAL AND ENGINEERING DATA ON ABOVE SIZES OF TYPE LWS PREVENTERS

Refer to Figs. 43 and 44

Size	Max. Service Press. Rating psi	Test Press. psi	Vertical Bore	Max. Ram Size	Approx. Weight Lbs. Studded Flange Single	Approx. Weight Lbs. Studded Flange Double	A Height Single Studded Flange	A Height Single Bolted Flange	A Height Double Studded Flange	A Height Double Bolted Flange	B Width	C Length	D Center To Front	E Center To Rear	F Door Open To Change Rams	G Door Open To Change Rams	Closing Ratio	Opening Ratio	U.S. Gals. Fluid To Close Rams	U.S. Gals. Fluid To Open Rams
8"	3,000	6,000	8"	7"	----	3,500	----	----	29[illegible]"	41[illegible]"	25¾"	79[illegible]"	11[illegible]"	14[illegible]"	23"	48"	5.8 to 1	1.8[illegible] to 1	2.75	2.2
8"	5,000	10,000	8"	7"	----	3,900	----	----	29[illegible]"	45[illegible]"	25¾"	79[illegible]"	11[illegible]"	14[illegible]"	23"	48"	5.8 to 1	1.8[illegible] to 1	2.75	2.2
10"	5,000	10,000	11"	8[illegible]"	5,000	7,000	24[illegible]"	24[illegible]"	23"	50[illegible]"	25[illegible]"	85[illegible]"	12[illegible]"	18"	22"	46"	5.5 to 1	1.5 to 1	2.25	2.2
12"	3,000	6,000	12[illegible]"	10[illegible]"	----	6,300	----	----	24[illegible]"	47[illegible]"	31[illegible]"	92[illegible]"	13[illegible]"	18[illegible]"	27"	53"	5.58 to 1	1.8[illegible] to 1	2.55	2.3
13⅝"	5,000	10,000	13[illegible]"	10[illegible]"	6,500	9,700	26[illegible]"	26[illegible]"	26"	45[illegible]"	33[illegible]"	97[illegible]"	14[illegible]"	18[illegible]"	41"	64"	5.58 to 1	1.5 to 1	3.55	2.3
16"	3,000	6,000	15[illegible]"	12[illegible]"	----	8,500	----	----	35"	51"	55[illegible]"	105[illegible]"	15[illegible]"	20[illegible]"	22"	65"	5.5[illegible] to 1	1.57 to 1	2.8	2.2