BASIN FUELS, INC.

Formation Information and Drilling Practice

WELL:

Jay Jay No. 1

LOCATION:

2310' FSL & 330' FWL
Sec 18-T20N-R5W
McKinley Co., NM

LEASE NUMBER:

NM-5979

1) Geologic name of surface formation.

Kirtland

2) Estimated tops of important geologic markers.

La Ventata	875
Chacra	1233
Cliff House	1779
Menefee	1841
Point Lookout	2675

3) Estimated depths at which anticipated water, oil,gas or other mineral-bearing formations are expected.

2675' - oil & gas

4) Proposed casing program.

Surface: 9 5/8", 36#, K-55, new casing to be set at 100'. Cement will be with 100 sk. Class "B" + 2% gel + 0.5% CFR-2.

Production: 5 ½", 15.5, K-55, New casing to be set at 2750'. Cement will be 325 sk. Class "B" + 2% gel + 0.5% CFR-2.

5) Specifications for pressure control equipment.

The attached schematic shows the type of blow out preventer to be used while drilling. The unit will be tested to 800 psi with the rig pump prior to drilling from under surface. Both blind and pipe rams will be tested. Operation of the hydraulic system will be checked daily.

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
2600-2750	gel-chem	35-40	8.8-9.4	8

7) Auxiliary equipment.

a. biy 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

8) Coring:

NONE

Drill Stem Testing:

NONE

9) Abnormal temperatures, pressures, or hazardous conditions.

None expected.

10) Starting date.

Anticipated starting date is May 22, 1978. Approximately 6 days will be needed to build roads and location and drill the well to total depth. If commercial, completion will commence immediately and require 10 days.

SHAFFER TOOL WORKS

ATTACHMENT TO POINT 5
6" 6 00 SERIES API

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

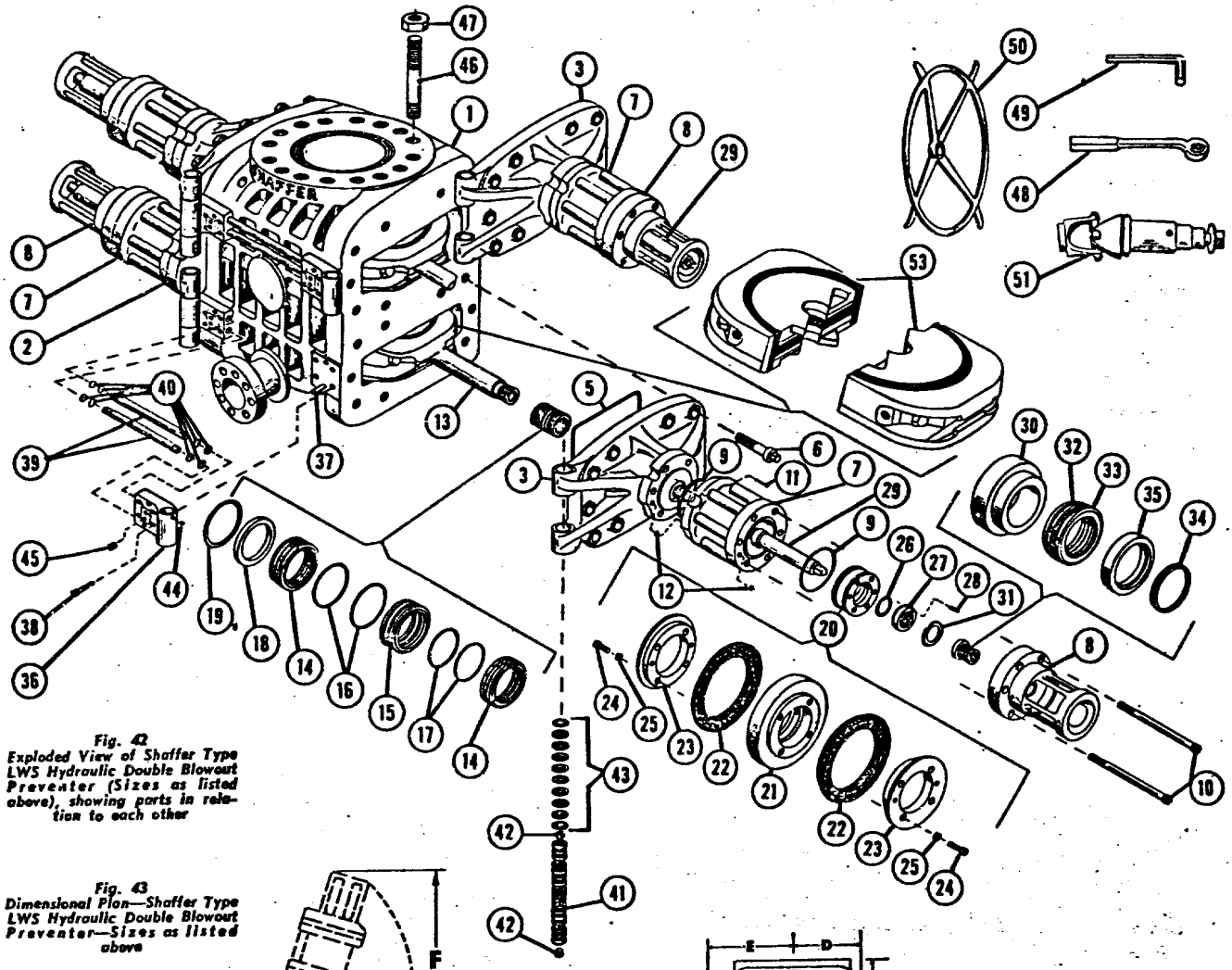


Fig. 42
Exploded View of Shaffer Type LWS Hydraulic Double Blowout Preventer (Sizes as listed above), showing parts in relation to each other

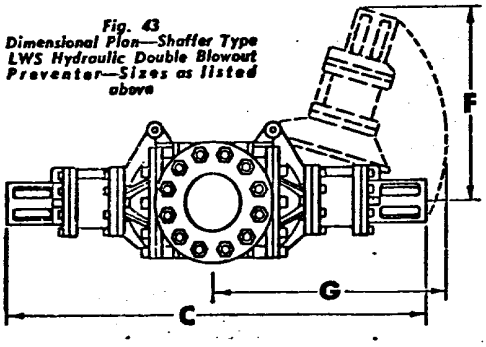


Fig. 43
Dimensional Plan—Shaffer Type LWS Hydraulic Double Blowout Preventer—Sizes as listed above

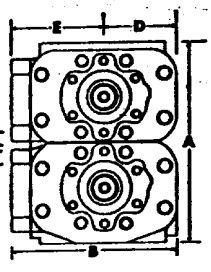


Fig. 44
Dimensional End Elevation—Shaffer Type LWS Hydraulic Double Blowout Preventer—Sizes as listed above

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	9"	7"	----	3,900	----	----	29½"	41½"	25½"	79½"	11¾"	14¾"	22"	46"	5.8 to 1	1.89 to 1	2.75	2.2
8"	5,000	10,000	9"	7"	----	3,900	----	----	29½"	45½"	25½"	79½"	11¾"	14¾"	22"	46"	5.8 to 1	1.89 to 1	2.75	2.2
10"	5,000	10,000	11"	8¾"	5,000	7,000	34½"	34½"	33"	50½"	28¾"	83¼"	12¾"	16"	22"	46"	5.5 to 1	1.5 to 1	3.25	2.7
12"	3,000	6,000	13⅝"	10¾"	----	6,300	----	----	34½"	47¾"	31½"	92¾"	13¾"	18¾"	27"	53"	5.56 to 1	1.89 to 1	3.55	2.9
12"	5,000	10,000	13⅝"	10¾"	6,800	9,700	36½"	36½"	36"	49½"	33½"	92¾"	14¾"	18¾"	41"	54"	5.56 to 1	1.5 to 1	3.55	2.9
16"	3,000	6,000	16¾"	13⅝"	----	8,500	----	----	38"	51"	56¾"	106½"	16½"	20½"	32"	60"	5.56 to 1	1.89 to 1	3.8	3.2

BASIN FUELS, INC.

Development Plan for Surface Use

WELL:

Jay Jay No. 1

LOCATION:

2310' FSL & 330' FWL
Sec. 18-T20N-R5W
McKinley Co., NM

LEASE NUMBER:

NM 5979

1) Existing roads. (Shown in green)

The attached topographic map shows all existing roads within one mile of the proposed location. All roads are in fair condition and will require a minimal amount of work to upgrade them to handle normal drilling activity traffic.

2) Planned access road. (Shown in red)

The new access road will be approximately 20' wide and ½ mile long. NO cut, fill, turnouts, or culverts will be needed. No fences, gates or cattle guards will be crossed. Maximum grade will be 5%. Water bars will be used where needed to aid drainage and help prevent erosion.

3) Location of existing wells.

All wells (water, abandoned, disposal, and drilling) are shown and so labeled on the attached topographic map.

4) Location of existing production facilities.

All production facilities for this well will be located on the site.

All tank batteries, production facilities or production, gathering and service lines within one mile of the proposed location are shown on the attached topographic map.

5) Location and type of water supply.

Water for drilling will be trucked from Chapman's water hole, approximately 35 miles northwest of the location. This water is privately owned.

6) Source of construction material.

Any construction material required for road or location will be excess material accumulated during building of such sites.

7) Methods of handling waste material.

(Refer to attached well site layout.)

All material that can be safely burned will be so disposed when weather conditions permit.

All nonburnable waste (drilling fluids, cuttings, chemicals, etc.) will be held in the reserve pit until dry, and then buried. Any oil that accumulates on the pit will be removed prior to leaving the pit to dry. Pits will be fenced during dry out, then completely back-filled with dirt prior to preparing the location for production or abandonment.

7) Any solid waste that can not be buried will be taken from the location and properly destroyed.

All portable chemical toilet will be supplied for human waste.

8) Ancillary facilities.

None planned.

9) Well site layout.

The attached layout shows the drilling rig with all supporting facilities. Cut and fill, required for pad construction, is also shown.

10) Plans for restoration of surface.

Restoration of the well site and access road will begin within 90 days of well completion, weather permitting.

Should the well be abandoned, the drilling site will be reshaped to its approximate former contour. The access road will be plowed and leveled. Both road and location will have top soil replaced and will be reseeded when germination can occur.

Should the well be commercial, that portion of location not needed for operation will be repaired as above. The portion of the location needed for daily production operations, and the access road, will be kept in good repair and clean.

In either case, cleanup of the site will include burning any safely burnable material, filling of all pits, and proper disposal of any nonburnable material that can not be safely buried. Any oil that has accumulated on the pits will be trucked away.

11) Other information.

General topography of the area may be seen on the attached map.

This location is one mile west of the Continental Divide at Ceja Del Raton Mesa. The site has a small westerly slope. The area is sandy and is covered with sage brush and native grasses. There is evidence of sheep and small anumal life in the area.

Surface at this location belongs to the Bureau of Land Management.

There are no occupied dwellings in the area.

There were no archaeological or cultural sites visible on the location. The archaeologist's report is forthcoming.

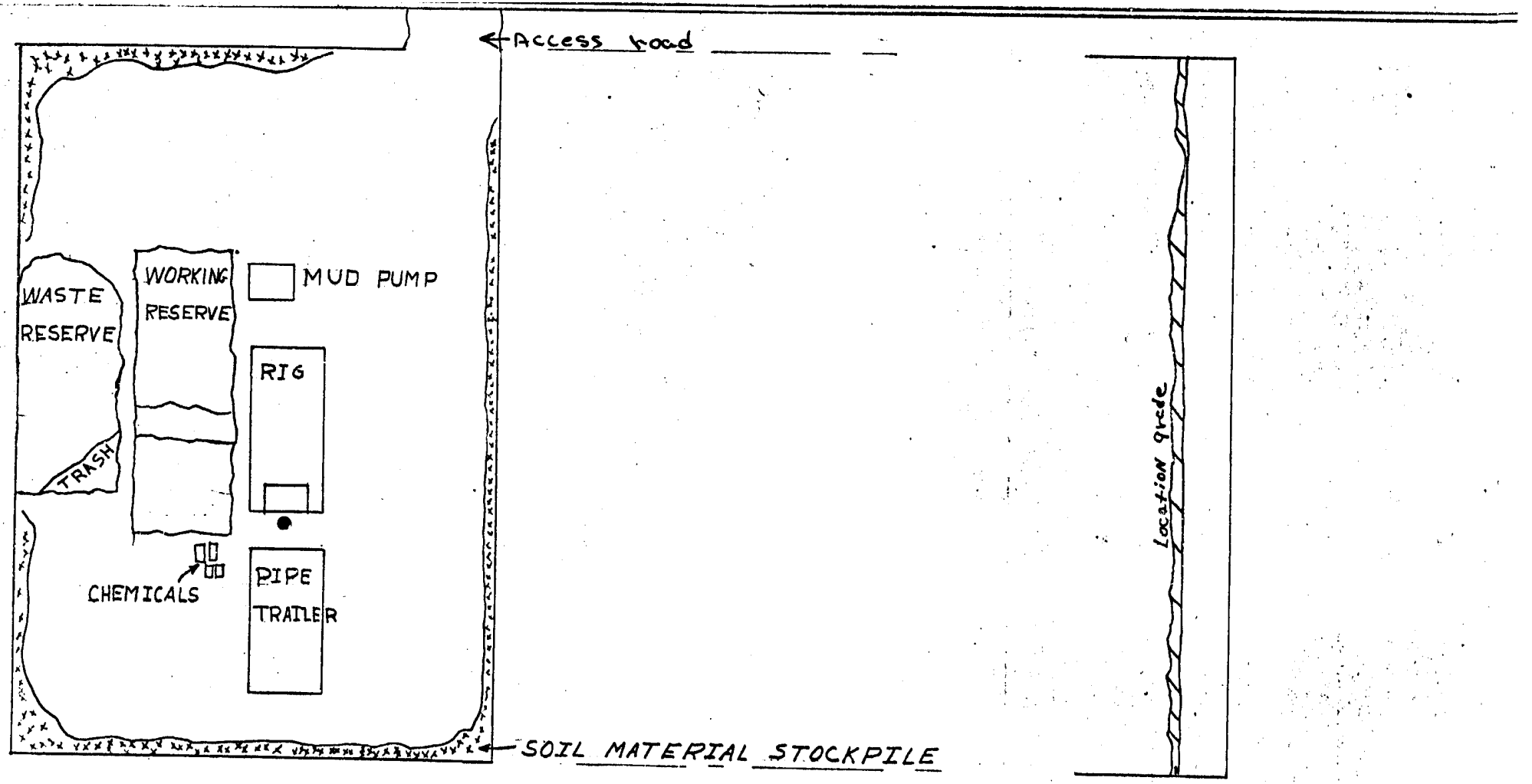
12)

John Alexander
3E Company, Inc.
P.O. Box 190
Farmington, NM 87401
Phone: 505-327-4020

13) 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 the 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 Basin Fuels, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

5-2-91

John Alexander



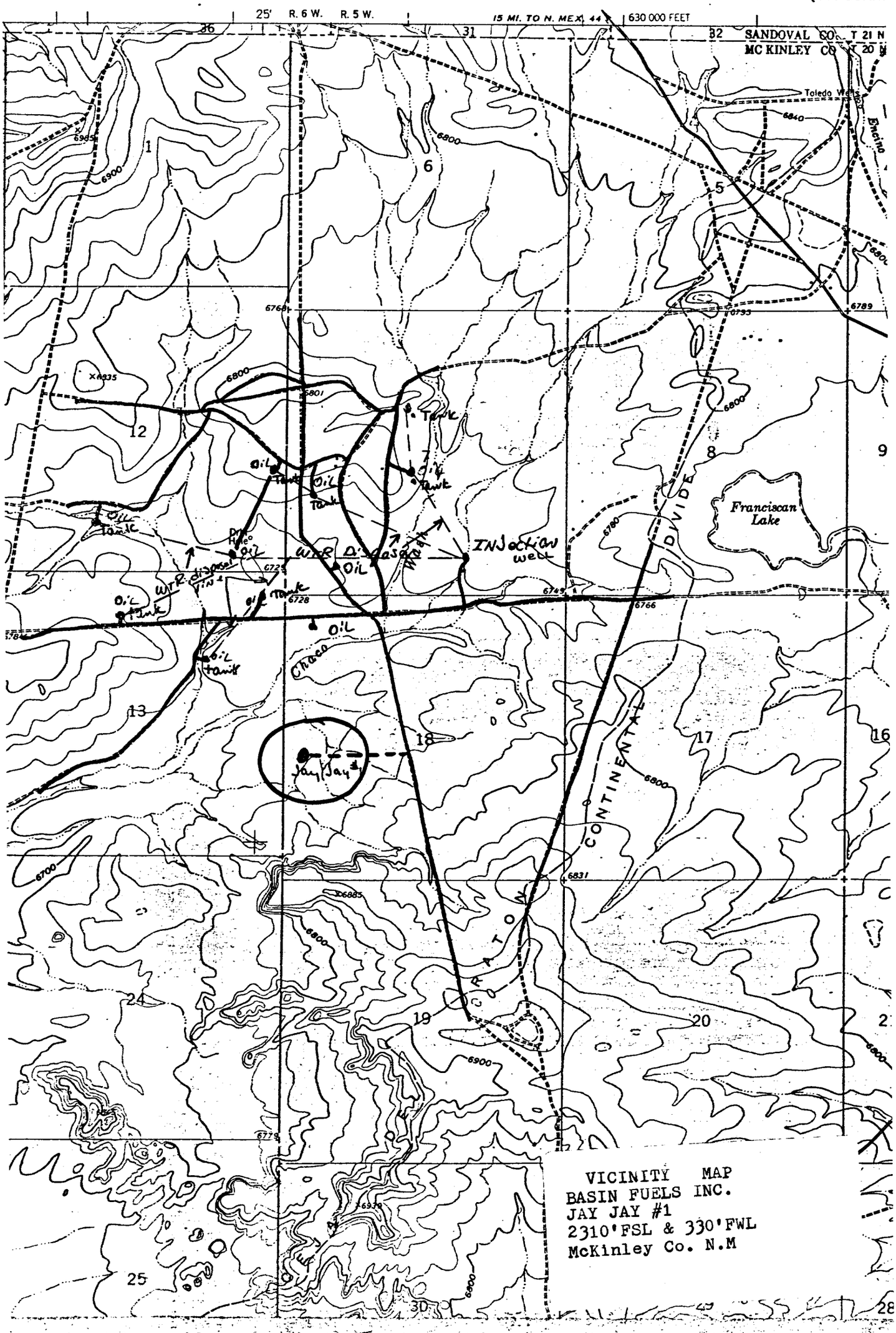
PLAN VIEW 1"=30'
ALL PITS - EARTHEN

CUT & FILL (SIDE) - 6" TOP SOIL

WELL SITE LAYOUT
BASIN FUELS

6" top soil only

STAR LAKE QUADRANGI
NEW MEXICO
7.5 MINUTE SERIES (TOPOGRAI



VICINITY MAP
BASIN FUELS INC.
JAY JAY #1
2310'FSL & 330'FWL
McKinley Co. N.M