API # 30-003-20017

Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM 61316

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: --

7. UNIT AGREEMENT NAME: --

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

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

8. FARM OR LEASE NAME: SWEPI et al ASPEN FEDERAL

2. NAME OF OPERATOR: SHELL WESTERN E&P INC.

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: P. O. BOX 576 HOUSTON, TX 77001 ATTN: A. J. Fore

10. FIELD AND POOL, OR WILDCAT: WILDCAT

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 5162' South and 2733' East of NW Corner of sec. 27.
Approx. 118' FSL & 2733' FWL of Sec. 27
At proposed prod. zone

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 27, T1S, R13W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 8 Miles S/SE of Pie Town, NM

12. COUNTY OR PARISH: Catron — 13. STATE: New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
Approx 1 mile	5760	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
First Well	9000'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 8115'

22. APPROX. DATE WORK WILL START*: 9/15/87

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
See Attachment B, Section 4				

ATTACHMENTS ARE:
A. Survey Plat
B. Drilling Program
C. BOP Schematic
D. Choke Manifold Schematic
E. Surface Use Program
F. Road and Well Location Map
G. Cross Section of Drill Pad & Reserve Pit
H. Drill Pad Layout
I. Production Facility Sketch

BUREAU OF LAND MANAGEMENT ROSWELL DISTRICT OFFICE RECEIVED AUG 20 1987 ROSWELL, NEW MEXICO

A Surface Rehabilitation Plan will be forwarded when executed by Surface Owner.

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 A. J. Fore — TITLE Supervisor Regulatory & Permitting — DATE August 19, 1987

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY S/Phil Kirk — TITLE Area Manager — DATE OCT 20 1987

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL OF THIS APPLICATION DOES NOT WARRANT OR CERTIFY THAT THE APPLICANT HOLDS LEGAL OR EQUITABLE TITLE TO THOSE RIGHTS IN THE SUBJECT LEASE WHICH WOULD ENTITLE THE APPLICANT TO CONDUCT OPERATIONS THEREON.

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

ATTACHMENT A

Northland Exploration Surveys, Inc.

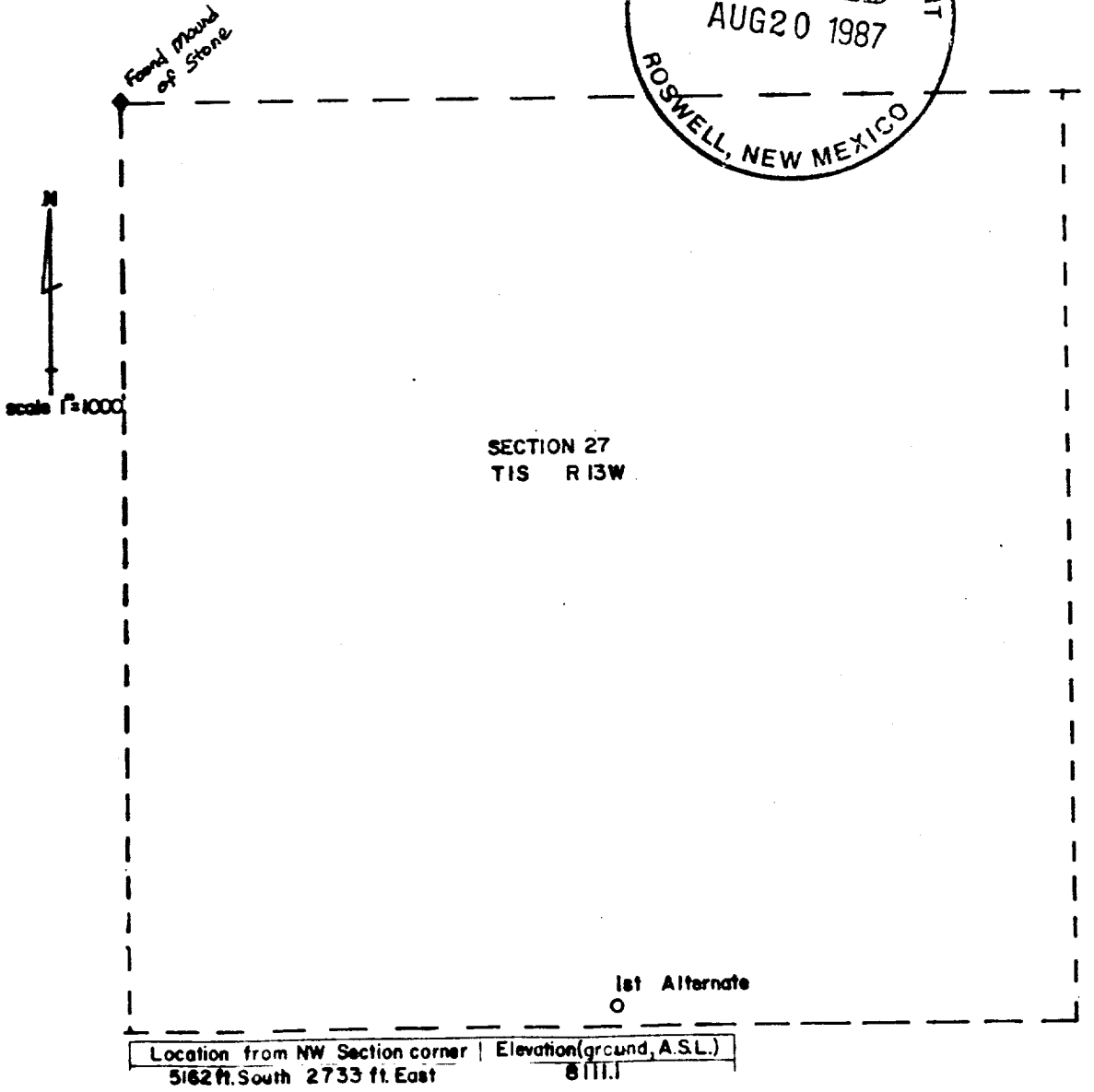
SWEPI et al ASPEN FEDERAL No. 1

WELL LOCATION PLAT

Located in the

S 1/2 of Section 27, T 1S, R 13 W, New Mexico
Principal Meridian, Catron County, New Mexico

Bearings based on Solar Observations
NW corner of section was only corner found in field
Elevation from SWEPI Seismic Point 900-4 Line 85-120-183, 8146.53' A.S.L.



Location from NW Section corner	Elevation (ground, A.S.L.)
5162 ft. South 2733 ft. East	8111.

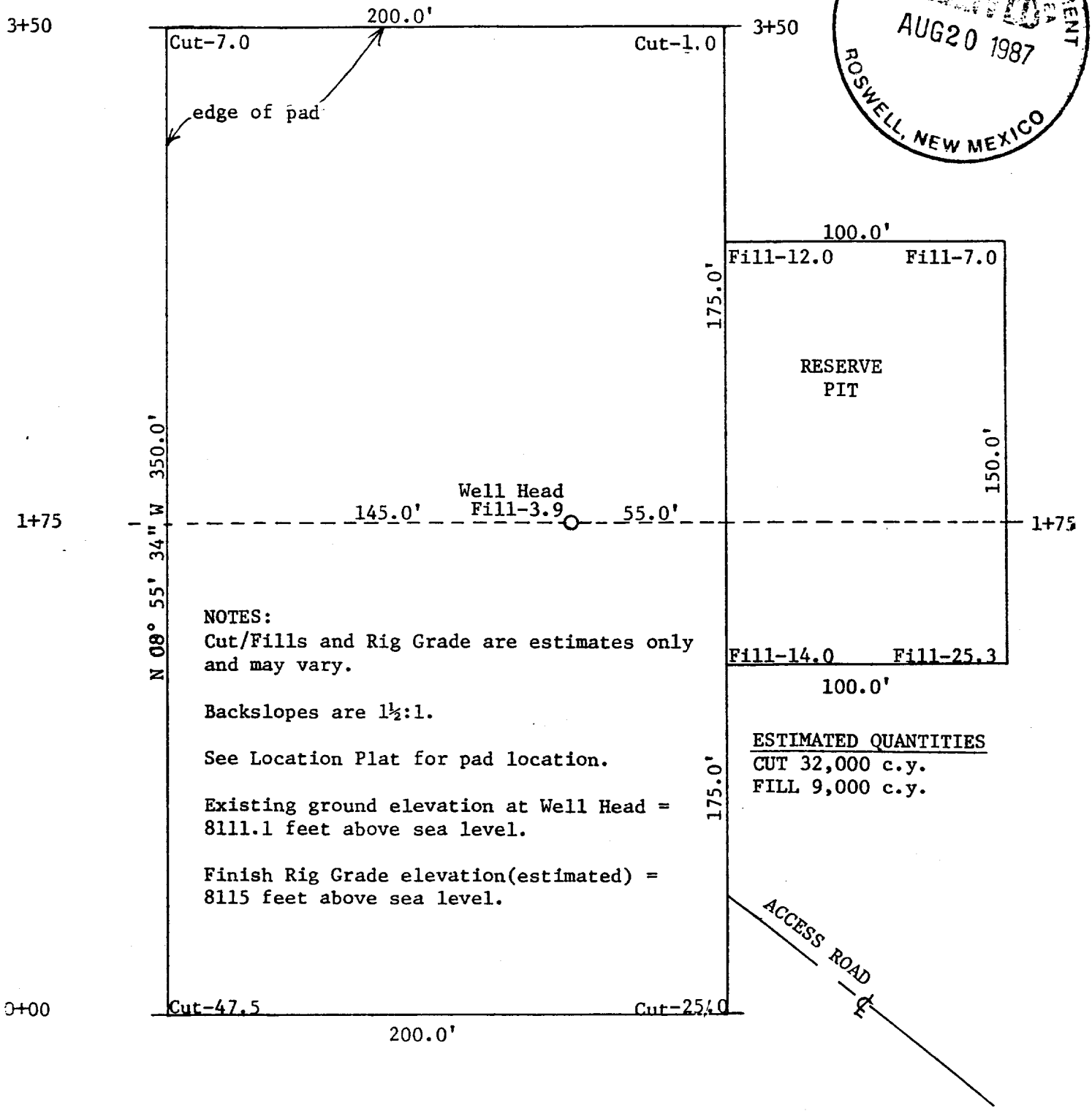
P. O. Box 1401 / Flagstaff, Arizona 86002 / (602) 774-5057

Northland Exploration Surveys, Inc.

DRILL PAD LAYOUT

SWEPI et al ASPEN FEDERAL #1
Section 27, T1S, R13W,
Catron County, New Mexico

~~FIRST ALTERNATE SITE~~



NOTES:
Cut/Fills and Rig Grade are estimates only and may vary.

Backslopes are 1½:1.

See Location Plat for pad location.

Existing ground elevation at Well Head = 8111.1 feet above sea level.

Finish Rig Grade elevation(estimated) = 8115 feet above sea level.

ESTIMATED QUANTITIES
CUT 32,000 c.y.
FILL 9,000 c.y.

P. O. Box 1401 / Flagstaff, Arizona 86002 / (602) 774-5057

ATTACHMENT B

SWEPI et al ASPEN FEDERAL #1
SE SE SW SECTION 27-T1S-R13W
CATRON COUNTY, NEW MEXICO

Drilling Program (First Revision)
Onshore Oil & Gas Order No. 1

1. Estimated Tops of Important Geologic Markers

Baca	1517'
Cretaceous	3617'
Triassic	4942'
San Andres	5381'
Glorieta	5739'
Yeso	6005'
Abo	7344'
Pennsylvanian	7934'
Pre-Cambrian	8034'
TD	8200'

2. Estimated Depths of Anticipated Water, Oil, Gas or Minerals

San Andres	5381'-5739'	Oil
Glorieta	5739'-6005'	Oil
Yeso	6005'-7344'	Oil

3. Minimum Pressure Control Equipment

Attachment C is a schematic diagram of the minimum blowout preventer equipment to be used. The BOP's will be hydraulically tested to the full working pressure after nippling up and after any use under pressure. Additional pressure tests will be performed periodically (at least every 30 days) on the BOP equipment. Pipe rams will be operationally checked each 24-hour period, as will blind rams each time the pipe is pulled out of the hole. Such checks will be noted on daily drilling reports. Accessories to the BOP include a kelly cock, floor safety valve, drill string BOP, and choke manifold with 2000 psi or greater pressure rating. Attachment D is a schematic diagram of the minimum choke manifold to be used.

4. Proposed Casing and Cementing Program

All casing strings (except the conductor casing) will be pressure tested (0.2 psi/foot or 1000 psi, whichever is greater) prior to drilling the plug after cementing.

a. Conductor: Cemented at 80' with redimix.

b. Surface casing: New 11-3/4" 42# H-40 STC at 1000' in 14-3/4" hole. Sufficient cement to circulate to surface. Approximately 350 sacks light cement with 1% $CaCl_2$ and 1/4 lb/sk cellophane flakes followed by 200 sacks Class C cement with 2% $CaCl_2$ and 1/4 lb/sk cellophane flakes. Drill out with an 11" bit and drill to the top of the San Andres at approximately 5381'. At this point, reduce hole size to 7-7/8".

c. Intermediate casing (this is a contingency string and will be used in the event of hole problems or lost circulation): New 8-5/8" 32# K-55 STC from surface to 2100'; new 8-5/8" 24# K-55 STC from 2100'-2500'; new 8-5/8" 32# K-55 STC from 2500'-6025' in an 11" hole. If this casing is run, the 7-7/8" hole will be opened to 11" from the top of the San Andres to casing point. Sufficient cement will be pumped to cover any potentially productive zones with top of cement a minimum of 500' above the shoe. Cement slurries are estimated at approximately 150 sacks light cement (with retarder if necessary) followed by 100 sacks Class C cement.

d. Production casing (if warranted by shows, logs): New 5-1/2" 14# K-55 STC from surface to approximately 5800'; new 5-1/2" 15.5# K-55 STC from approximately 5800' to 8200' in a 7-7/8" hole. Sufficient cement will be pumped to cover any potentially productive zones with top of cement a minimum of 500' above the shoe. Anticipated cement volume is approximately 450 sacks 50/50 Poz with fluid loss control agent (retarder and salt if necessary).

5. Proposed Circulating Medium

a. Spud mud from surface to 1000' with sufficient viscosity to provide hole cleaning. Mud weight 8.4-8.8 ppg.

b. Fresh water, low solids nondispersed system from 1000'-6025'. Mud weight 8.6-9.0 ppg; water loss $\leq$ 10 cc beginning at 3400'.

c. Fresh water, low solids nondispersed system from 6025'-TD if no salt is encountered in the Yeso. If there is salt in the Yeso, a brine starch system will be used. Mud weight 8.6-10.2 ppg, depending on whether salt is encountered. Water loss $\leq$ 10 cc.

Note: Mud material (including weighting material), not less than that needed to make a mud volume equal to the calculated active downhole and surface capacity, will be maintained at the drill site for emergency use. The mud monitoring system will consist of a flow sensor and pit level indicators.

6. Proposed Coring, Testing, and Logging Program

a. Coring: 150' in San Andres
30' in Glorieta
270' in Yeso

b. Testing: Potential DST's in the San Andres and the Yeso.

c. Logs: Run #1 from 6025' to 1000' with GR to surface (if 8-5/8" casing is run or if salt is encountered in the Yeso; if neither of these instances occur, there will be one logging run from TD to 1000' with GR to surface).

GR/DIT-E/SP; NGT/LDT/CNTG/AMS; Array Sonic; SHDT; VSP; Sidewall Samples; Gearhart Core Driller (optional)

Run #2 from TD to 6025'

GR/DLL/MSFL: NGT/LDT/CNTG/AMS; Array Sonic; SHDT; VSP; Sidewall Samples; Gearhart Core Driller (optional)

7. Expected Bottom Hole Pressure and Potential Hazards

a. Expected BHP: 3900 psi (hydropressured or underpressured)

b. Anticipated abnormal temperatures: A temperature gradient in the range of 2°F/100 ft.

c. Hydrogen sulfide potential: This test is not expected to penetrate any formation containing hydrogen sulfide in hazardous quantities. However, due to limited offset information in the area, precautions for H_2S will be taken.

8. Duration of Operations

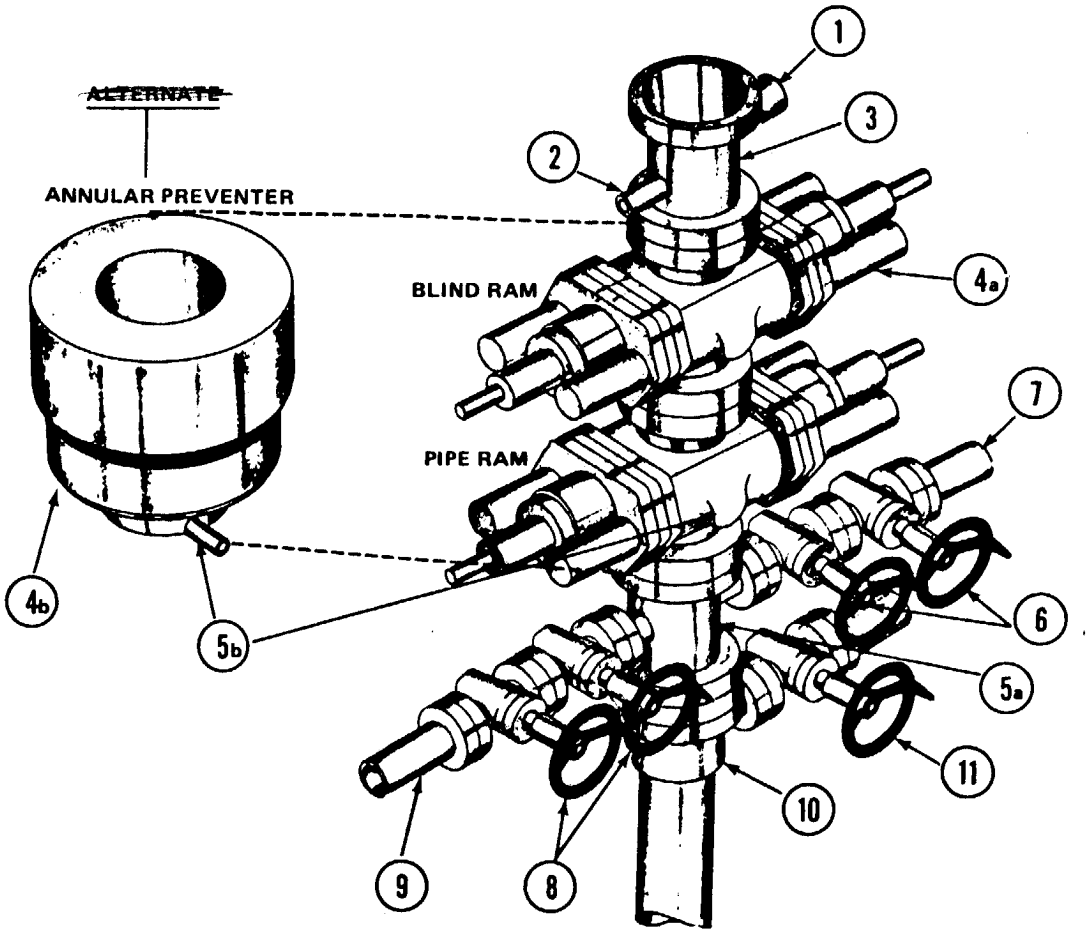
Location building operations are anticipated to take 1-2 weeks. Drilling operations are expected to take 45-55 days (including possible P&A operations). Completion/testing operations (if warranted) are anticipated to take approximately 30 days.

DRAWING & CHECK LIST 102
SHELL CLASS 2M
SURFACE INSTALLATIONS NORMAL

SHELL MINIMUM BOP STACK REQUIREMENTS			
No.	Item	Min. I.D.	Min. Nominal
1	Flowline		
2	Fill up line		2"
3	Drilling nipple		
4a	Two single or one dual hydraulically operated rams*		
	— or —		
4b	Annular Preventer		
5a	Drilling spool with 2" and 2" outlets		
	— or —		
5b	2" outlets in ram or annular preventer. Run kill line and choke line from these outlets. (Alternate to 5a above.)		
6	Gate Valves	2-1/16"	
7	Line to choke manifold		2"
8	Gate Valves	2-1/16"	
9	Line to rig mud pump manifold		2"
10	Casing spool		
11	Gate Valve	1-13/16"	

OPTIONAL			
12	Wear flange or bore protector		

*For well servicing – not mandatory to be hydraulically operated.



NOTE: Second wing valve on choke (6) and kill (8) lines not mandatory unless drilling below 2,000'.

MINIMUM CHOKE MANIFOLD
DRAWING NO. 201
SHELL CLASS 2M
SURFACE INSTALLATION NORMAL

ATTACHMENT D

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating. Low pressure lines downstream from a choke can contain screwed connections.
2. All flanges to be API 6B and ring gaskets shall be API RX.
3. All lines shall be securely anchored.
4. Choke to be equipped with tungsten carbide seat and needle and replacement parts shall be available on location.
5. Line from drilling spool to choke manifold to be straight as possible. Line downstream from chokes shall make turns by large radius bend or 90° bends using bull plugged tees.
6. Discharge line from choke, and choke bypass, should vent as far as practical from the well.
7. Additional specifications for Sour Service and Air/Gas Service are given in Shell Well Control Manual, Appendix 6.17 and Appendix 6.18

Shell Western E&P Inc.
A Subsidiary of Shell Oil Company

P.O. Box 576
Houston, TX 77001

October 7, 1987

Bureau of Land Management
Socorro District Office
198 Neel Ave., N.W.
Socorro, NM 87801

Gentlemen:

SWEPI ET AL ASPEN FEDERAL
WELL NO. 1
SECTION 27, T1S, R13W
CATRON COUNTY, NEW MEXICO

Please find enclosed an amended surface use program for the subject test. Included are statements indicating our revised water source and the increased amount of projected road usage.

Additionally, a signed Owner-Operator agreement ("Rehabilitation Plan") and some road upgrade cross-sections are enclosed. As you have also requested, all appropriate surface owners are in the process of being notified of our anticipated access road traffic.

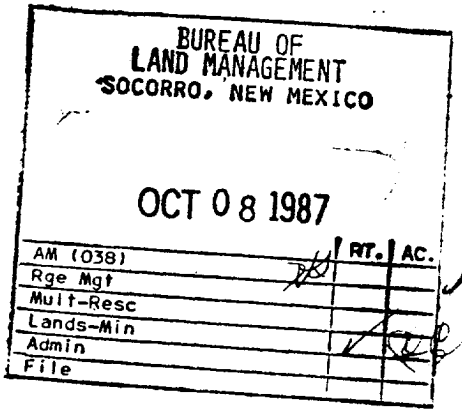
If additional information is required, please advise.

Yours very truly,

A. J. Fore
Supervisor Regulatory and Permitting
Safety, Environmental and Administration
Western Division

JMW:EN

Enclosures



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SWEPI ET AL ASPEN FEDERAL #1
S 1/2 SECTION 27-T1S-R13W
CATRON COUNTY, NEW MEXICO

SURFACE USE PROGRAM
ONSHORE OIL & GAS ORDER NO. 1

1. Existing Roads

a. The proposed route to the location is to go South of Pie Town, NM on county roads approx. 7-1/2 miles then West on existing private roads 2 miles then South and West 1-1/4 miles on an entrance road to be constructed to the location (see Attachment F).

b. The existing roads will be maintained in as good or better condition than presently exists. No changes will be made in these roads except to improve them where necessary to support the anticipated traffic load. During rig move, the wings of cattle guards may have to be layed back to allow passage of wide loads. A guard will be posted while the wings are down and they will be immediately replaced in as good or better condition than they previously were.

c. Road traffic on the entrance road during drilling of the subject well will include the following:

1. The rig move will consist of 13 to 15 truck loads. Three loads will be of approx. 80,000# while the remainder will be from 10 to 30,000#.

2. Surface casing hauled to the location will consist of two trucks of approx. 46,000# (1 day).

3. Production casing (if run) will consist of 4 trucks of approx. 109,000# (1 day).

4. Cement hauled on two occasions will consist of 3 trucks weighing approx. 80,000# each.

5. Mud and Fuel trucks will deliver about once each week, weight approx. 30,000#.

6. Other daily traffic will be limited, probably consisting of 3 or 4 pick-ups or passenger cars in and out daily. On special occasions other light traffic such as logging trucks, testing trucks and other delivery trucks will be in and out of the location.

7. Fresh water will be hauled to the drill site for approx. 70 days at 4 trips per day. Gross weights of each delivery equals approx. 60,000#.

2. Access Roads to be Constructed

The approx. 1-1/4 miles of entrance road will be sand and gravel all weather construction, designed to logging load standard or better. Culverts will be installed and ditching done where justified to prevent flooding and excessive erosion. Cattle guards will be placed in fence cuts. All newly constructed roads will be on private surface.

3. Existing Wells

There are no wells within one mile of this location.

4. Existing and/or Proposed Production Facilities

a. On Well Pad - All production facilities will be located on the well pad as illustrated in Attachment I.

b. Off Well Pad - No facilities will be off the well pad.

5. Location and Type of Water Supply for Drilling

Water will be hauled from the two water wells (on a fee lease) currently providing water to our SWEPI et al Mangas Mountains Federal #1. Both wells are located in Section 5, T2S-R14W.

6. Construction Materials

All construction material will be borrow material accumulated during construction of the location and pit, or will be purchased from local pits. The exact location of these pits is not presently known, however if they fall off-lease, use permits will be obtained if required.

7. Waste Disposal Methods

All garbage, trash and drilling debris will be stored in a burn cage and hauled to an approved landfill site. If the trash is burned on location, the burn cage will be lowered into a burn hole before burning. No trash or debris will be buried in the reserve pit.

Sewage will be confined to septic tanks which will be installed close to personnel trailers.

8. Ancillary Facilities

None required.

9. Well Site Layout

   a. Attachment H is the drill pad layout illustrating the location of drilling equipment, trailers, pits, etc. Trailers will be located off the drill pad but close enough to use the pad for parking of vehicle.

   b. Attachments G are Drill Site Profiles illustrating the cross-section of the drill pad and entrance road.

   c. The pit will be lined with a double thick 10 mil nylon reinforced plastic liner.

   d. During construction, rocks and soil removed from the pad and pit areas will be used in road and location construction. Any trees, slash, and stumps will be disposed of as recommended by the surface owner or his agent.

10. Plans for Surface Restoration

    Restoration will be in compliance with the surface owners certified rehabilitation plan.

    a. Trailers will carefully be removed from their sites and the septic tanks removed. The area will be cleaned and leveled back to its original contour. Any bare spots will be re-seeded to rehabilitation plan specification.

    b. All liquids will be removed from the Reserve Pit and hauled to an approved disposal site. The solids will be tested for toxicity. If they are found to be non-toxic, exposed edges of the plastic liner will be folded over the solids, then rock and dirt, removed during site construction, used to bridge over the pit area. If the solids are found to be toxic, they too will be hauled to an approved disposal site.

    c. The drill pad will be used for testing equipment if the well is a success (see Attachment I). If the well is a dry hole, the location will be cleaned and covered with enough soil to support grass, then seeded per rehabilitation plan. The cellar would be filled and leveled with the exception of the dry hole marker.

11. Surface Ownership

    This well is located on Fee surface lands belonging to Mr. Robert Yeary, Route 2, Box 66, Morton, Texas 79346.

12. Other Information

A cultural resource survey was conducted by Northland Research, Inc. on July 14, 1987 under BLM Permit No. 22-2920-87-E. Although numerous wooden homestead structures exist adjacent to the survey area, none are within the proposed right-of-way. No cultural resources of any kind were located by this survey. A copy of the cultural resource survey has been sent to the proper BLM offices.

13. Lessee's or Operator's Representative and Certification

J. L. Clark
Shell Western E&P Inc.
Western Division
P. O. Box 576
Houston, TX 77001
Tel.: (713) 870-2966

A. J. Fore
Shell Western E&P Inc.
Western Division
P. O. Box 576
Houston, TX 77001
Tel.: (713) 870-3787

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 Shell Western E&P Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

10-07-87
Date

A. J. Fore
Supervisor Regulatory & Permitting

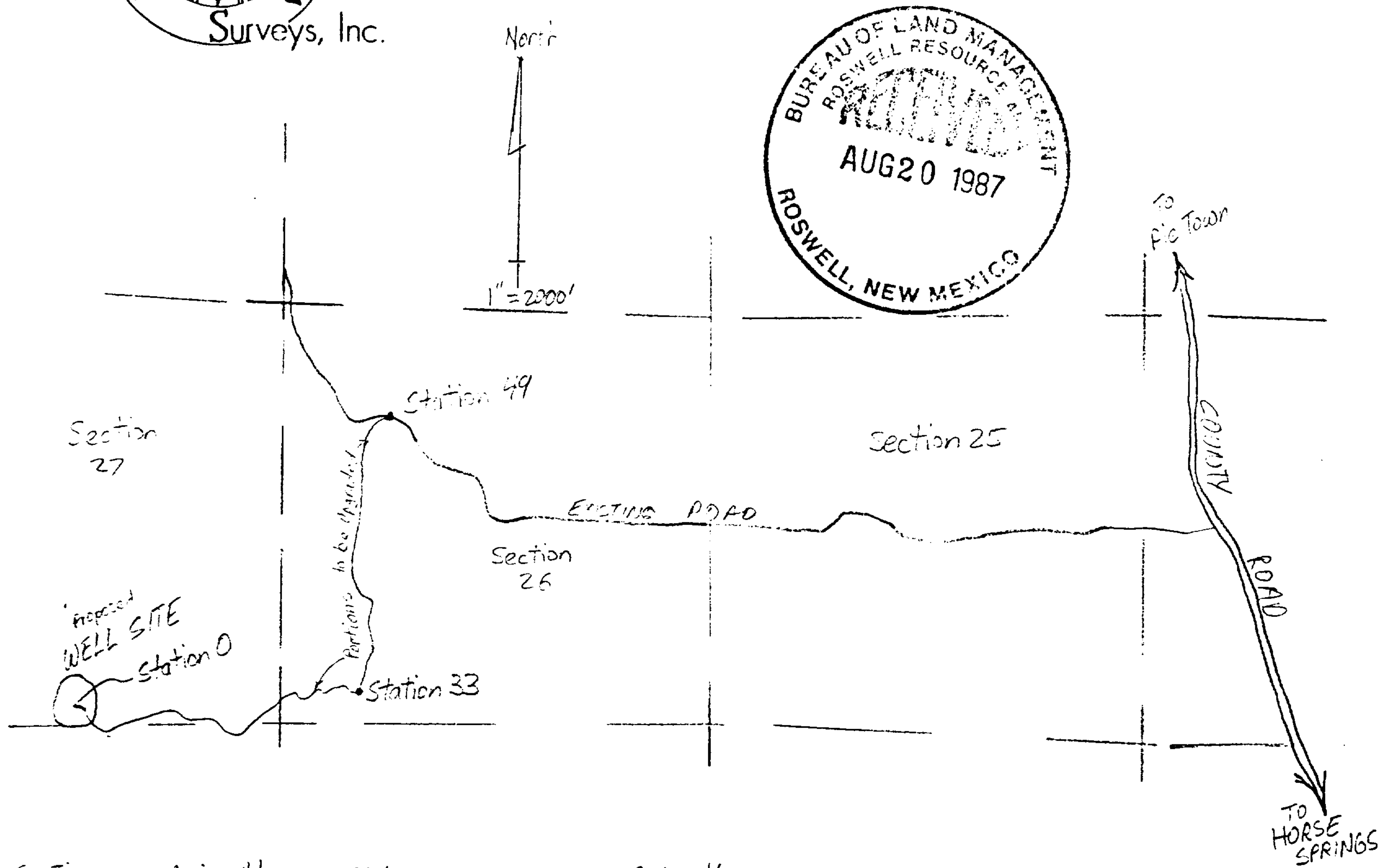
ATTACHMENT F

Access Road Plat

SWEPI

Section 2?, T1S, R13W
Catron County, N.M.

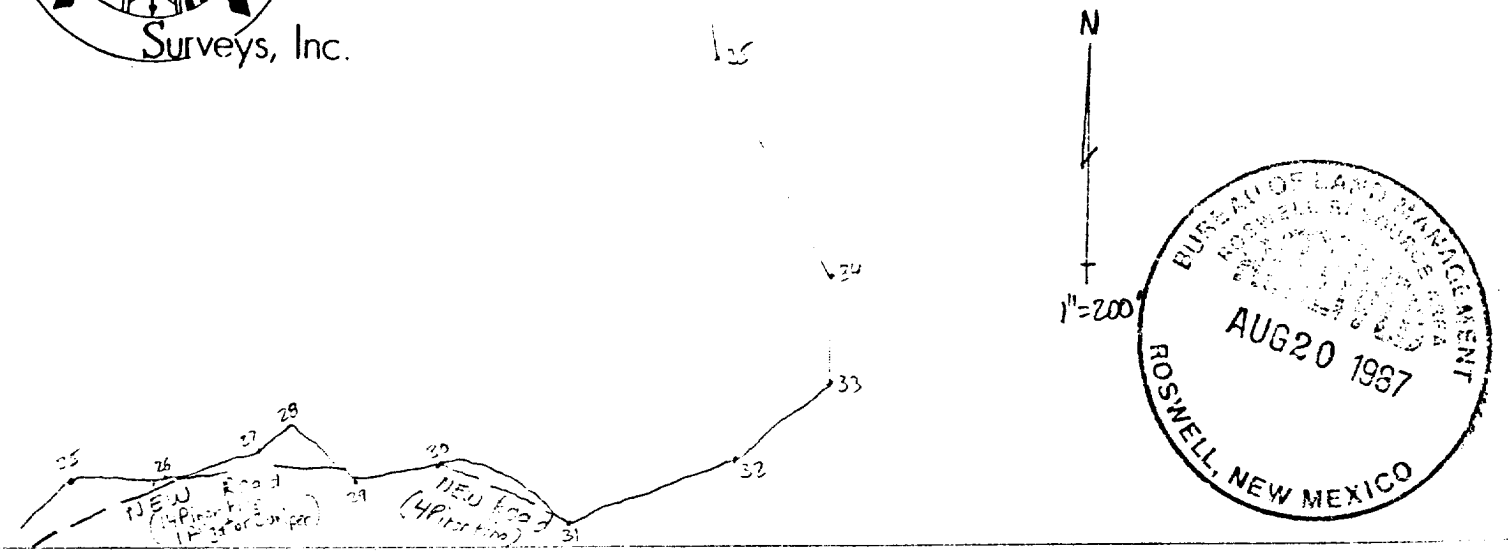
Northland Exploration Surveys, Inc.

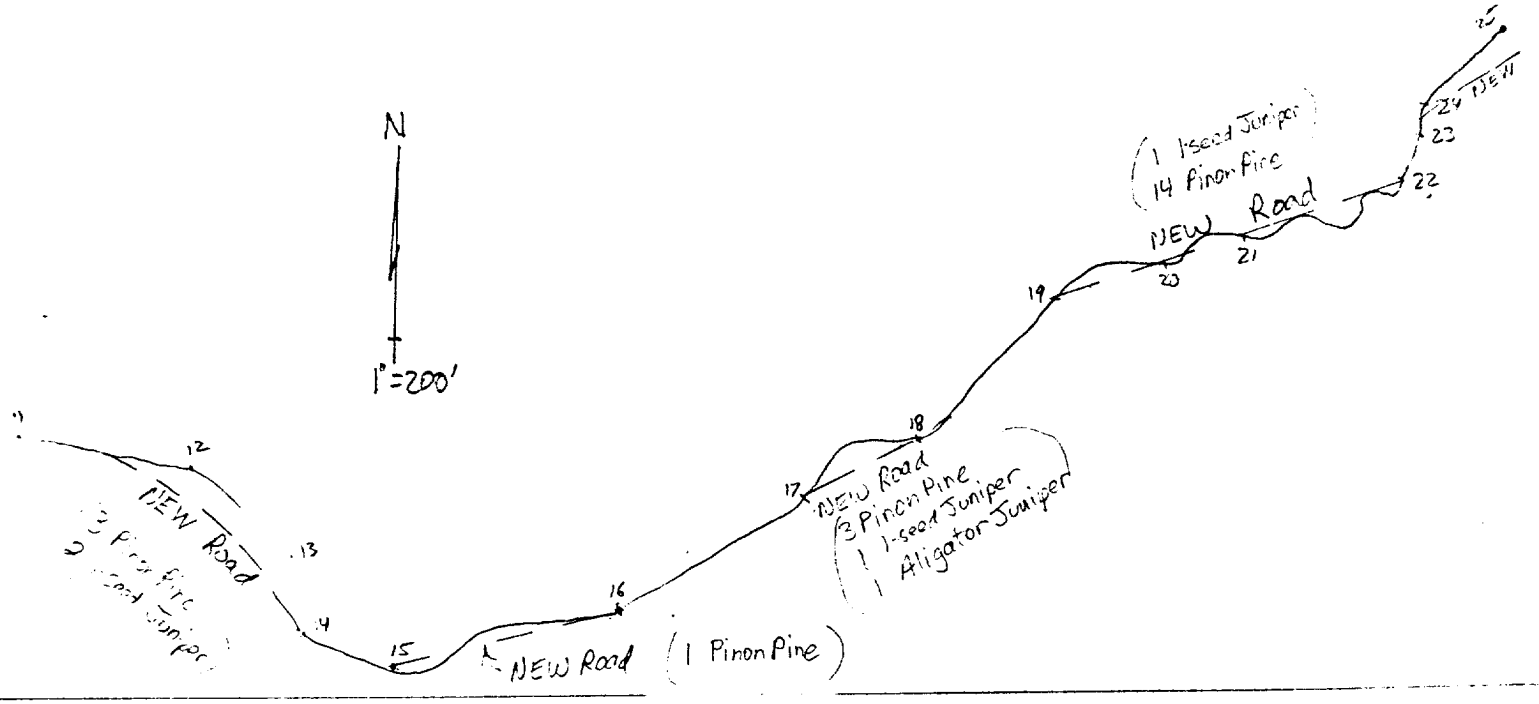


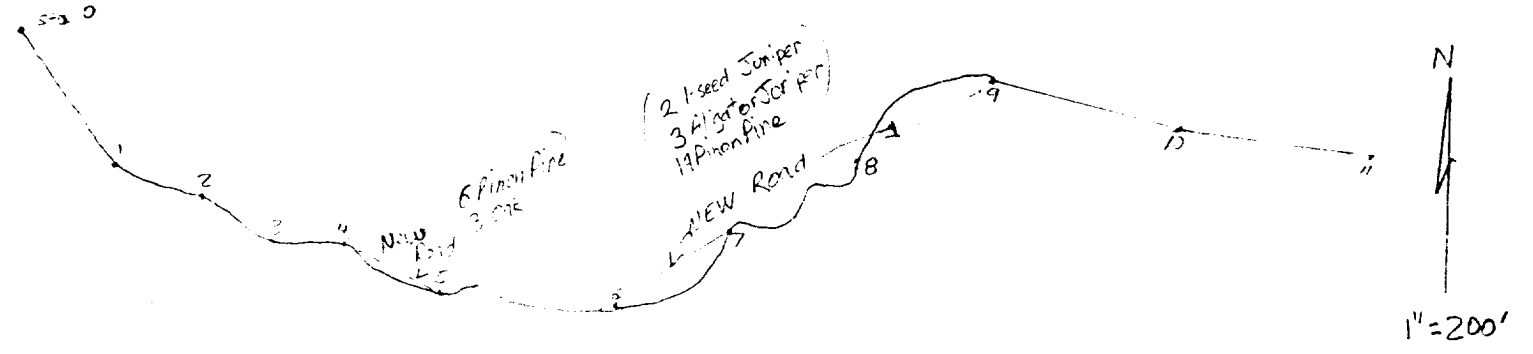
Station	Azimuth	Distance	Station	Azimuth	Distance	Station	Azimuth	Distance
0-1	S 146°30' E	155'	17-18	N 62° 45' E	134'	34-35	N 333°00' W	261'
1-2	S 112°30' E	110'	18-19	N 42° 00' E	201'	35-36	N 351°30' W	312'
2-3	S 121°00' E	83'	19-20	N 70° 30' E	123'	36-37	N 351°00' W	221'
3-4	S 90° 30' E	68'	20-21	N 71° 00' E	88'	37-38	N 336°00' W	174'
4-5	S 115°30' E	110'	21-22	N 69° 45' E	171'	38-39	N 358°30' W	208'
5-6	S 92° 30' E	187'	22-23	N 24° 00' E	54'	39-40	N 00° 00' W	209'
6-7	N 57° 30' E	140'	23-24	N 04° 30' E	34'	40-41	N 20° 30' E	210'
7-8	N 58° 00' E	153'	24-25	N 45° 45' E	112'	41-42	N 03° 00' E	125'
8-9	N 56° 30' E	205'	25-26	S 92° 00' E	85'	42-43	N 346°30' W	81'
9-10	S 104°30' E	202'	26-27	N 73° 45' E	118'	43-44	N 13° 30' E	355'
10-11	S 97° 45' E	202'	27-28	N 49° 00' E	40'	44-45	N 37° 30' E	37'
11-12	S 100°00' E	181'	28-29	S 129°30' E	88'	45-46	N 03° 30' E	155'
12-13	S 128°30' E	141'	29-30	N 79° 00' E	[illegible]	46-47	N 346°00' W	334'
13-14	S 168°30' E	79'	30-31	S 113°30' E	147'	47-48	N 05° 00' E	108'
14-15	S 109°00' E	96'	31-32	N 69° 00' E	189'	48-49	N 41° 00' E	[illegible]
15-16	N 75° 45' E	246'	32-33	N 51° 30' E	125'			
16-17	N 58° 30' E	227'	33-34	N 01° 00' E	107'			

P. O. Box 1401 / Flagstaff, Arizona 86002 / (602) 774-5057

Northland Exploration Surveys, Inc.



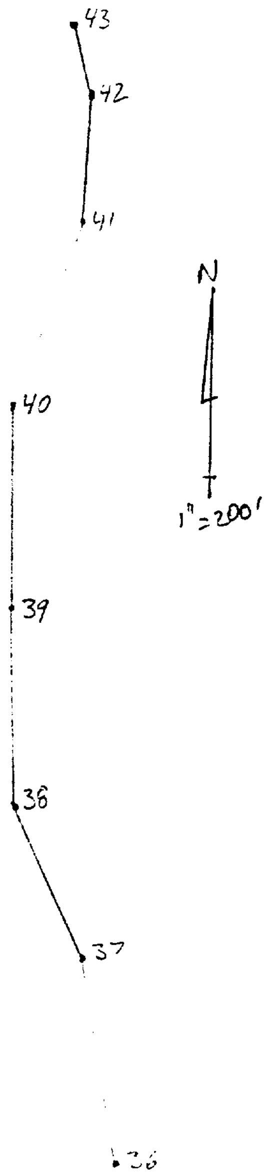


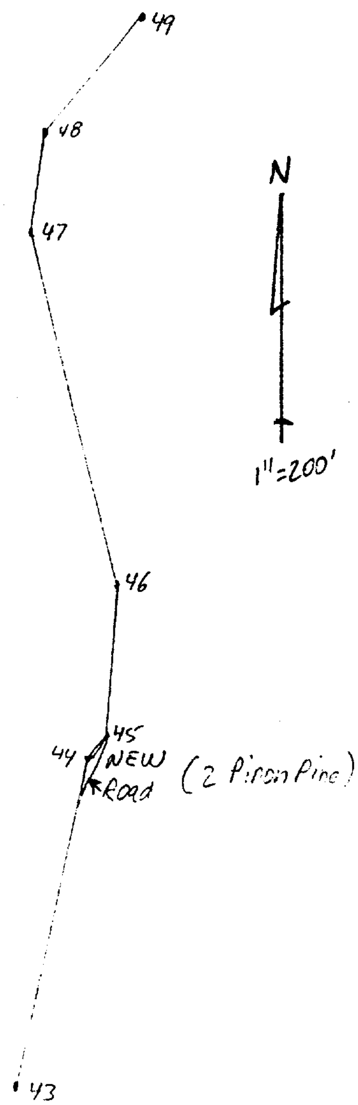


P. O. Box 1401 / Flagstaff, Arizona 86002 / (602) 774-5057

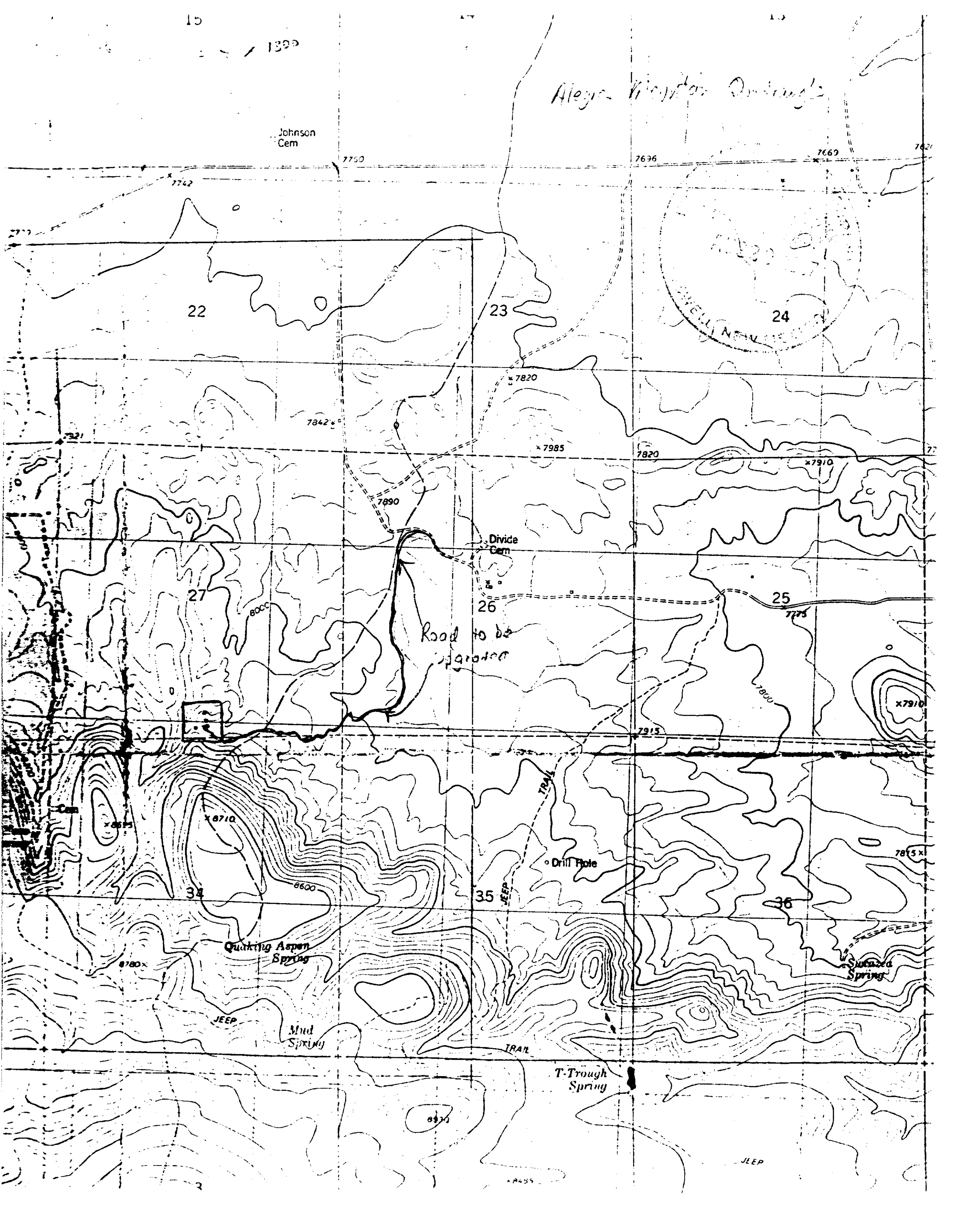
Northland Exploration Surveys, Inc.

Access Road Letter [illegible]
[illegible] Road [illegible] Flagging [illegible]
[illegible]
(about 4' [illegible])





P. O. Box 1401 / Flagstaff, Arizona 86002 / (602) 774-5057

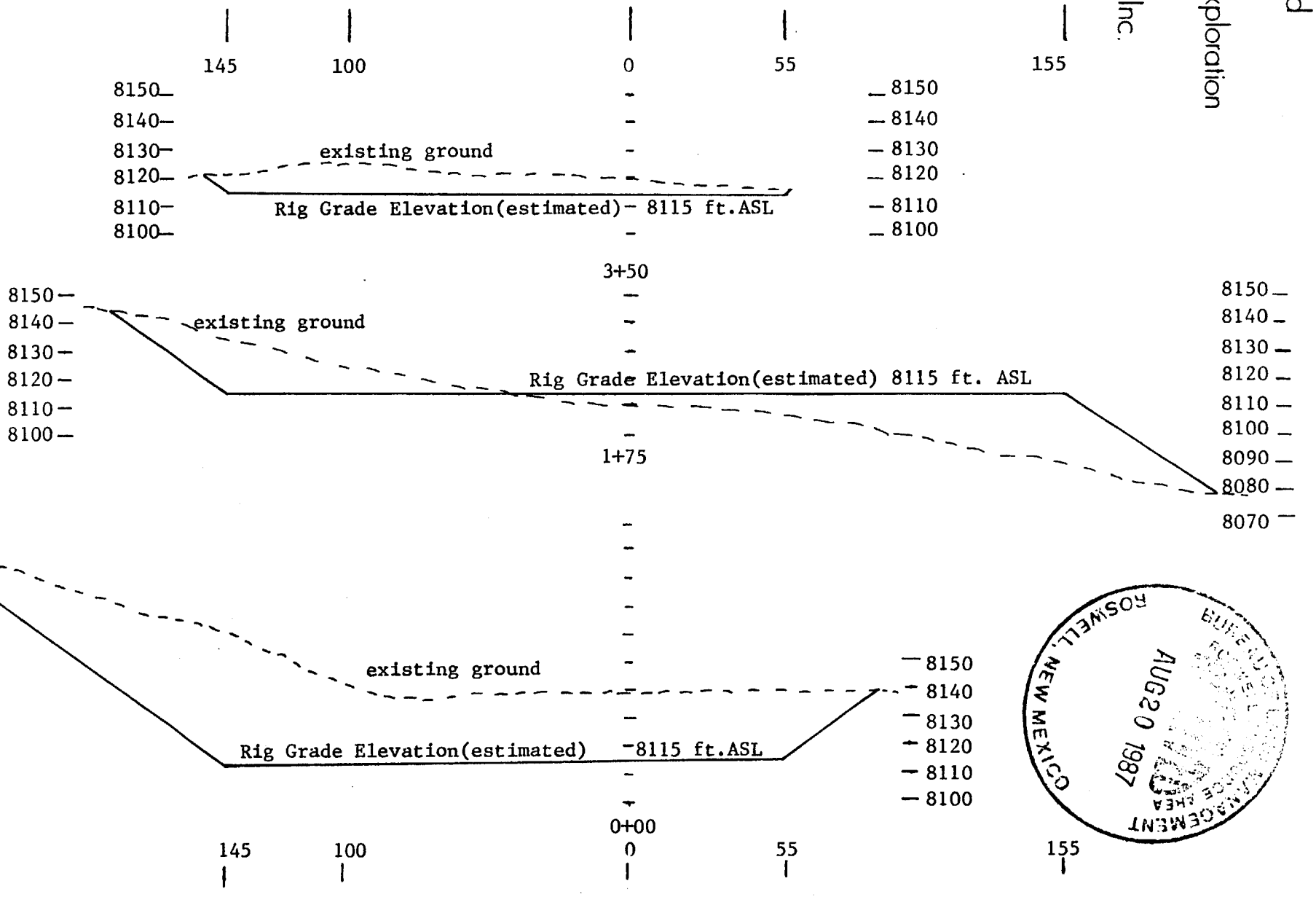


Johnson Cem
7750
7742
7696
7669
22
23
24
7820
7842
7985
7820
7910
7890
Divide Cem
27
26
25
8000
7775
Road to be upgraded
7800
7910
7915
TRAIL
Cem
8710
Drill Hole
8600
34
35
36
JEEP
Quaking Aspen Spring
8780
7815
Sweazea Spring
JEEP
Mud Spring
TRAIL
T-Trough Spring
JEEP

DRILL PAD PROFILE
SWEPI et al ASPEN FEDERAL #1- First Alternate Location
Section 27, T1S, R13W, Catron County, N.M.

SCALE: Horiz. 1"=50'
Vert. 1"=50'

NOTE:
Rig Grade Elevation is estimated, finish elevation may vary.



Northland Exploration
Surveys, Inc.
P. O. Box 1401 / Flagstaff, Arizona 86002 / (602) 774-5057

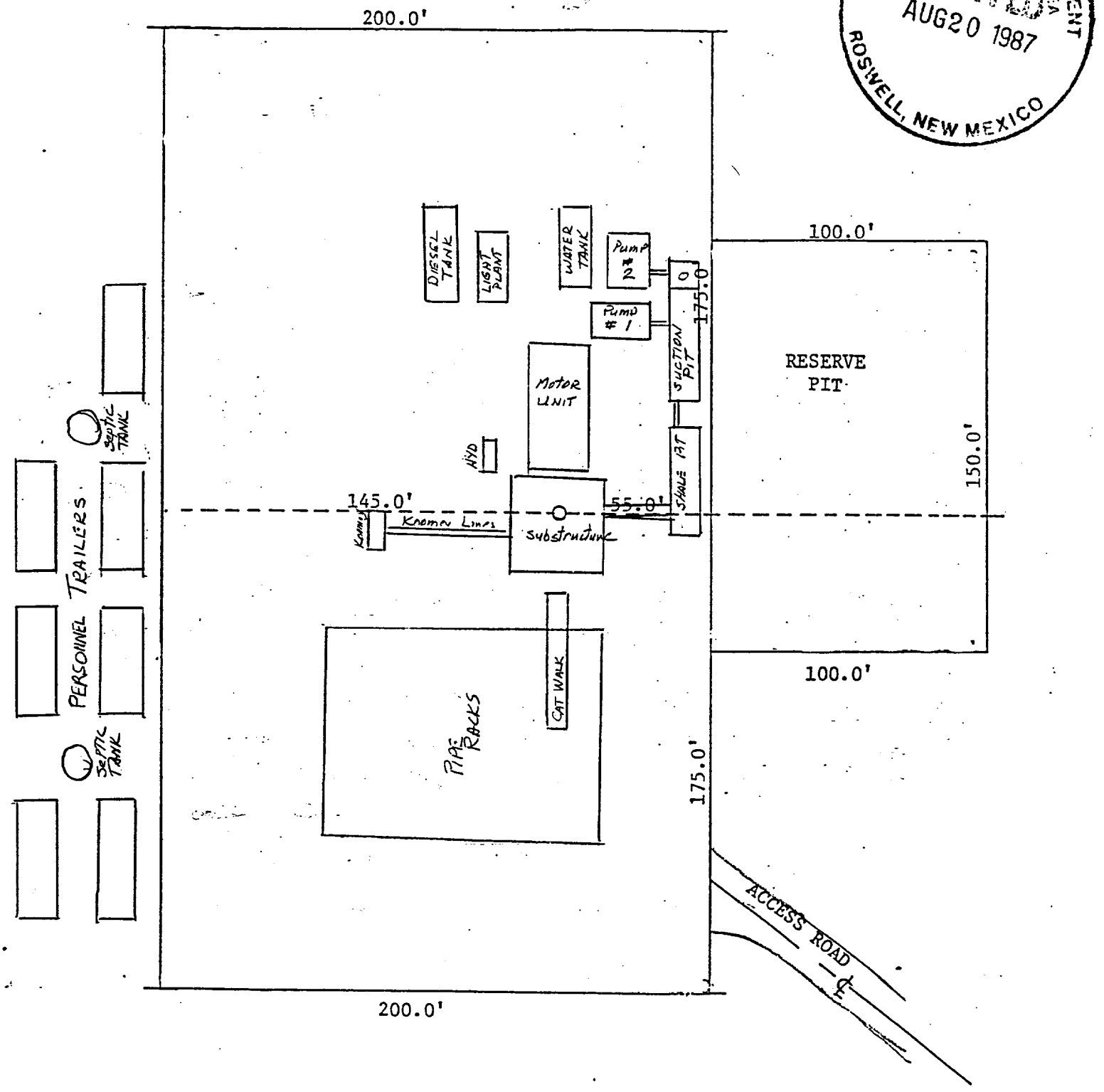
DRILL PAD PROFILE ~~FIRST ALTERNATE~~ SWEPI etal ASPEN FEDERAL #1

ATTACHMENT G

ATTACHMENT H

DRILL PAD LAYOUT

SWEPI et al ASPEN FEDERAL #1
Section 27, T1S, R13W,
Catron County, New Mexico



ATTACHMENT 1

PRODUCTION FACILITIES SKETCH

SWEPI et al ASPEN FEDERAL #1
Section 27, T1S, R13W,
Catron County, New Mexico