

PLEASE EXPEDITE

UNITED STATES M. Oil Cons. Div. Dist. 2
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1301 W. Grand Avenue
Alamosa, NM 88210

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☐DEEPEN ☐

R-111-POTASH

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

SAGA PETROLEUM, LLC. (JOE CLEMENT 432-684-4293)

3. ADDRESS AND TELEPHONE NO.

415 WEST WALL STREET SUITE 1900 MIDLAND, TEXAS 79705 (432-684-4293)

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

At surface 660' FWL & 440' FSL SECTION 35 T23S-R29E EDDY CO. NM

At proposed prod. zone 1310' FWL & 660' FSL SECTION 35 T23S-R29E

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

Approximately 30 miles Southeast of Carlsbad New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

440'

18. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

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

1320'

19. PROPOSED DEPTH

14,100'

20. ROTARY OR CABLE TOOLS

ROTARY

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

3089' GR.

22. APPROX. DATE WORK WILL START*
WHEN APPROVED

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	Conductor 20"	NA	40'	Redi-mix to surface
17 1/2"	H-40 13 3/8"	48	540'	550 Sx. cement to surface
12 1/2"	J-55 8 5/8"	36	3100'	1200 Sx " " "
8 3/4"	P-110 7"	26	10,400'	750 Sx. 500' above any payzones
6 1/8"	P-110 4 1/2"	13.5	10,200-14,100'	450 Sx Cement top top of liner

RECEIVED

APR 07 2004

OCD-ARTESIA

1. See attached sheet for cementing and casing information.

2. This location had been approved by The Bureau of Land Management July 23 2001, but was not drilled due to the fact that the original company was in the process or being bought by Saga Petroleum, LLC.

3. Saga Petroleum, LLC. accepts the responsibility of operating this lease.

4. Please expedite this APD.

Carlsbad Controlled Water Basin

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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

TITLE

Agent

DATE

04/02/04

(This space for Federal or State office use)

PERMIT NO.

Application approval does not warrant or certify that the applicant holds legal or equal
CONDITIONS OF APPROVAL, IF ANY:If earthen pits are used in
association with the drilling of this
well, an OCD pit permit must be obtained prior to pit construction.
the applicant to conduct operations thereon.

/s/ Jesse J. Juen

ASSOC. STATE DIRECTOR

30 MAR 2004

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

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.

SAGA PETROLEUM, LLC.
GOODNIGHT "35" FEDERAL # 2
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM

1. Drill 25" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 540'. Run and set 540' of 13 3/8" 48# H-40 ST&C casing. Cement with 550 Sx. of Class "C" cement + ¼# Flocele/Sx., + 2% CaCl, circulate cement to surface.
3. Drill 12¼" hole to 3100'. Run and set 3100' of 9 5/8" 36# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" Light weight cement + additives, tail in with 200 Sx. of Class "C" cement + ¼# Flocele/Sx. + 1% CaCl, circulate cement to surface.
4. Drill 8 3/4" hole to 10,400'. Run and set 10,400' of 7" 26# P-110 LT&C casing. Cement with 750 Sx. of class "H" cement + fluid loss additive, + lost circulation material, top of cement must be 500' above the top of the upper most pay interval.
5. Drill 6 1/8" hole to 14,100. Run and set a 3900' 4½" 13.5# P-110 LT&C liner from 14,100' to 10,200'. Cement with 450 Sx. of Class "H" Premium cement + additives, cement to top of liner.
6. This will be a directional well and kickoff point 9000'±. Directional plans will be submitted shortly.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer D0, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 74480	Pool Name CEDAR CANYON-MORROW
Property Code	Property Name GOODNIGHT "35" FEDERAL	Well Number 2
OGRID No. 148967	Operator Name SAGA PETROLEUM, LLC	Elevation 3088'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	35	23 S	29 E		440	SOUTH	660	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	35	23 S	29 E		660	SOUTH	1310	WEST	EDDY

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

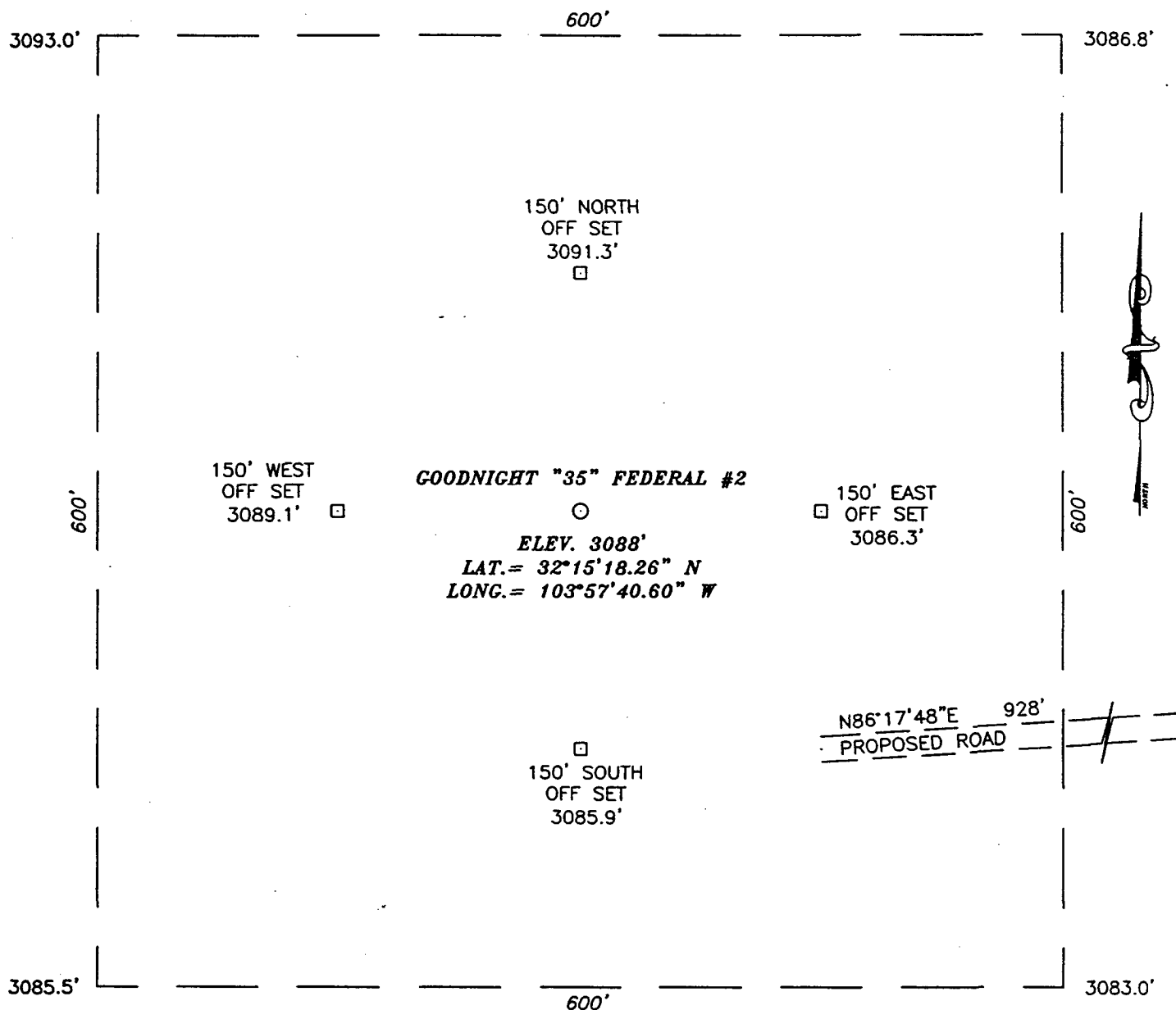
BOTTOM HOLE LOCATION Y-456933.7-N X-615663.3-E GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y-456712.2-N X-615015.4-E LAT. 32°15'18.26" N LONG. 103°57'40.60" W BOTTOM HOLE 1310' 685.0' 660' 440' GRID AZ = 71°07'25" 3093.0' 3086.8' 600' 600' 3085.5' 3083.0'	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <i>Joe T Janica</i> Signature Joe T. Janica Printed Name Agent Title 04/02/04 Date SURVEYOR CERTIFICATION 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 belief. JANUARY 29, 2004 Date Surveyed Signature & Seal of Professional Surveyor GARY EIDSON 04.11.0244 Certificate No. GARY EIDSON 12841
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EXHIBIT "A"

SECTION 35, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.,

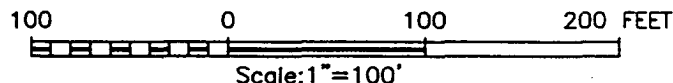
EDDY COUNTY,

NEW MEXICO.



DRIVING DIRECTIONS:

FROM THE INTERSECTION OF ST HWY 128 AND EDDY COUNTY ROAD #793 (RAWHIDE) GO SOUTH 7 MILES TO A GOOD CALICHE ROAD ON RIGHT. GO WEST 2 MILES TO FORK IN ROAD PASSING THROUGH CATTLE GUARD. TAKE RIGHT FORK. GO NORTHWEST 1.5 MILES TO A PROPOSED ROAD SURVEY TO THIS LOCATION. FOLLOW PROPOSED ROAD SURVEY WEST 0.2 MILES TO THE LOCATION.



SAGA PETROLEUM, LLC

GOODNIGHT "35" FEDERAL #2
LOCATED 440 FEET FROM THE SOUTH LINE
AND 660 FEET FROM THE WEST LINE OF SECTION 35,
TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

Survey Date: 1/29/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.0244	DRAWN BY: LMP Rev. 1: 3/3/04
Date: 1/2/04	DISK: CD '04 04110244 Scale: 1"=100'

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO - HOBBS, NEW MEXICO - 505-393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
REMUDA BASIN, N.M. - 10'

SEC. 35 TWP. 23-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 440' FSL & 660' FWL

ELEVATION 3088'

OPERATOR SAGA PETROLEUM, LLC

LEASE GOODNIGHT "35" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
REMUDA BASIN, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

APPLICATION TO DRILL

SAGA PETROLEUM LLC.
GOODNIGHT "35" FEDERAL # 2
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

1. Location of well: Surface location: 440' FSL & 660' FWL SEC. 35 T23S-R29E
Bottom Hole Location 660' FSL & 1310' FWL SEC. 35 T23S-R29E
2. Ground Elevation above Sea Level: 3089' GR.
3. Geological age of surface formation: Quaternary Deposits:
4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.
5. Proposed drilling depth: 14,100'

6. Estimated tops of geological markers:

Salado	600'	Wolfcamp	10,500'
Bell Canyon	3235'	Strawn	12,150'
Brushy Canyon	5655'	Atoka	12,400'
Bone Spring	6900'	Morrow	13,3500'

7. Possible mineral bearing formations:

Brushy Canyon	Oil	Strawn	Gas
Bone Spring	Oil	Atoka	Gas
Wolfcamp	Oil	Morrow	Gas

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
25"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-540'	13 3/8"	48	8-R	ST&C	H-40
12½"	0-3100'	9 5/8"	36	8-R	ST&C	J-55
8 3/4"	0-10,400'	7"	26	8-R	LT&C	P-110
6 1/8"	10,200-14,100'	4½"	13.5	8-R	LT&C	P-110

APPLICATION TO DRILL

SAGA PETROLEUM LLC.
 GOODNIGHT "35" FEDERAL # 2
 UNIT "M" SECTION 35
 T23S-R29E EDDY CO. NM

9. CASING SETTING DEPTH & CEMENTING:

20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix.
13-3/8"	Surface	Set 540' of 13 3/8" 48# H-40 ST&C casing. Cement with 550 Sx. of Class "C" cement + 1/4# Flocele/Sx., + 2% CaCl Circulate cement to surface.
9 5/8"	Intermediate	Set 3100' of 9 5/8" 36# J-55 ST&C casing. Cement with 1000 Sx. of Class "C" Light Cement + additives, tail in with 200 Sx. of Class "C" + 1/4# Flocele/Sx. + 1% CaCl, Circulate cement to surface.
7"	2nd Intermediate	Set 10,400' of 7" 26# P-110 LT&C casing. Cement with 750 Sx. of Class "H" cement + fluid loss additives + lost circulation material. Note top of cement must be 500' above the upper most Pay interval.
4 1/2"	Production liner.	Set a 3900' 4 1/2" 13.5# P-110 LT&C liner from 14,100' back to 10,200'. Cement with 450 Sx. of Class "H" Premium cement + additives, cement to liner top.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 1500 Series 5000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams and bottom pipe rams. This B.O.P. will be nipped up on the 13 3/8" casing and tested to API specification after each string of casing is run and cemented. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when Drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 5000PSI choke manifold with adjustable chokes. No pressures or temperatures are expected in this well.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WEIGHT	VISCOSITY	FLUID LOSS	TYPE MUD SYSTEM
40-540'	8.4-8.7	29-38	NC	Fresh water spud mud add paper to control seepage.
540-3100'	10.1-10.3	29-40	NC	Brine water use paper to control seepage and high high viscosity sweeps to clean hole.
3100-10,400'	10.1-10.3	34-40	NC	Brine water use lime to pH and use high viscosity sweeps to clean hole.
10,400-14,100'	10.1-10.4	34-40	*	Same as above, if needed to control pressures add Barite. Reduce water loss using a Polymer system.

* Water loss may be required prior to drilling the Strawn formation, and mud weight may be required prior to drilling the Wolfcamp.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs and casing, viscosity and water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

SAGA PETROLEUM LLC.
GOODNIGHT "35" FEDERAL # 2
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: From 3100' to surface Dual Laterolog, CNL, LDT, Gamma Ray Caliper.
From 10,400' to 3100' Dual Laterolog, MSFL, CNL, LDT, Gamma Ray Caliper.
From TD to 10400' Dual Laterolog, MSFL, CNL, LDT, Gamma Ray, Caliper run
Gamma Ray Neutron to surface.
- B. Mud logger on hole at 3100' to TD. Possible DST's in Wolfcamp, strawn, atoka
and Morrow. Cores may be taken at the Geologist's discession

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 8500± PSI, and Estimated BHT 190°±.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 50 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Morrow formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialied as gas well.

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
 - A. See exhibit "E" & "E-1"
6. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
7. Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If the location is near to a dwelling a closed DST will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.
9. If H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H_2S scavengers if necessary.

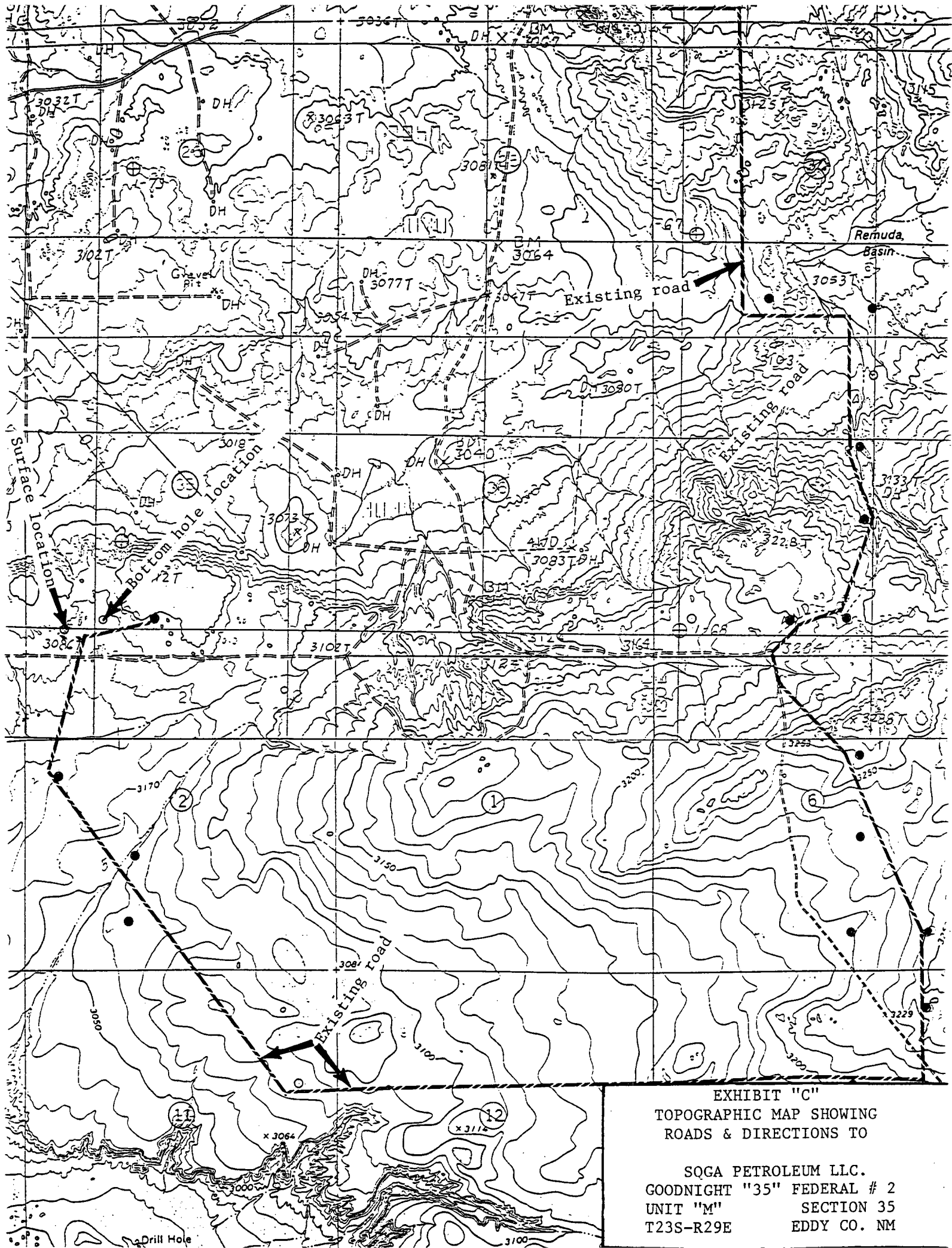
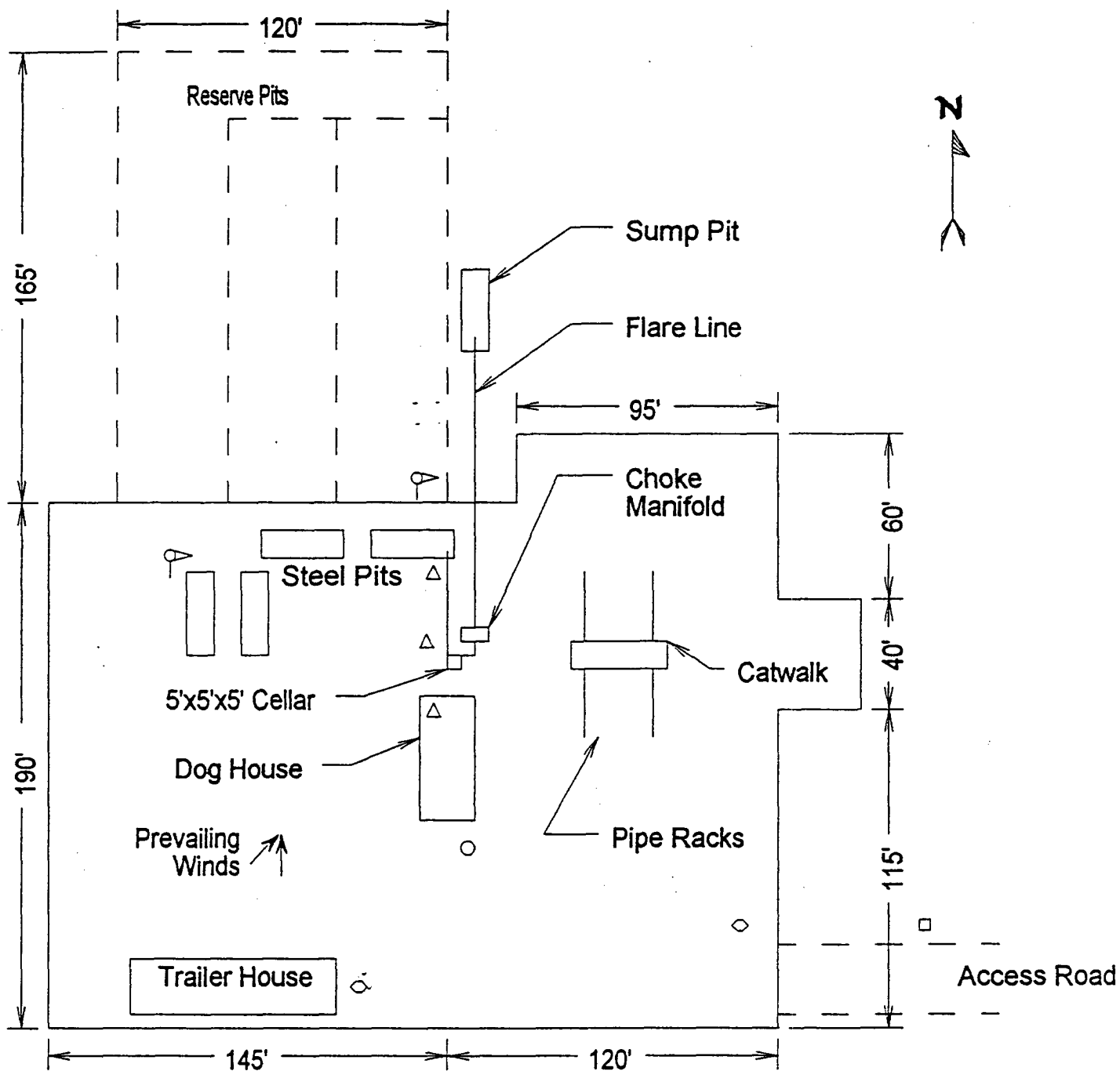


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

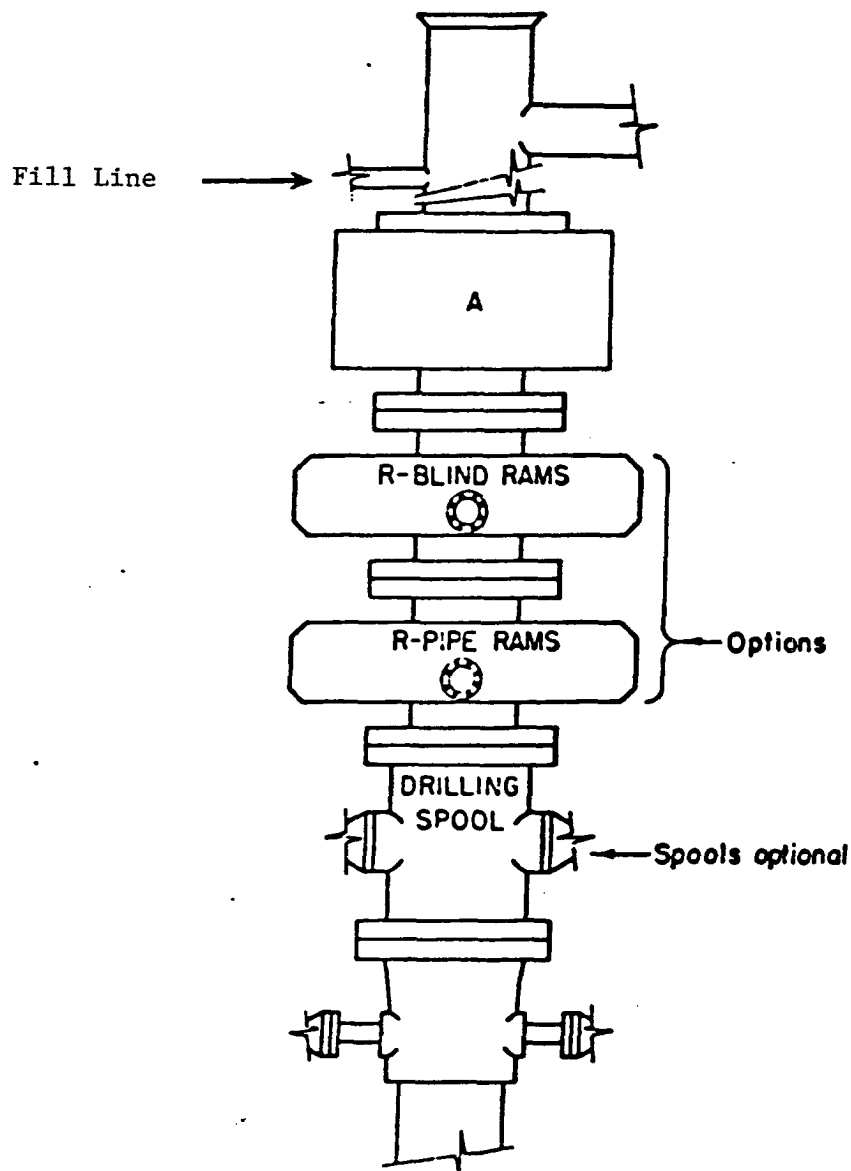
SQGA PETROLEUM LLC.
GOODNIGHT "35" FEDERAL # 2
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM



- ⊙ Wind Direction Indicators
(wind sock or streamers)
- △ H2S Monitors
(alarms at bell nipple and shale shaker)
- ◇ Briefing Areas
- Remote BOP Closing Unit
- Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

SAGA PETROLEUM LLC.
GOODNIGHT "35" FEDERAL # 2
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM



ARRANGEMENT SRRA

SERIES 1500 5000 PSI W.P.

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

SAGA PETROLEUM LLC.
GOODNIGHT "35" FEDERAL # 2
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM

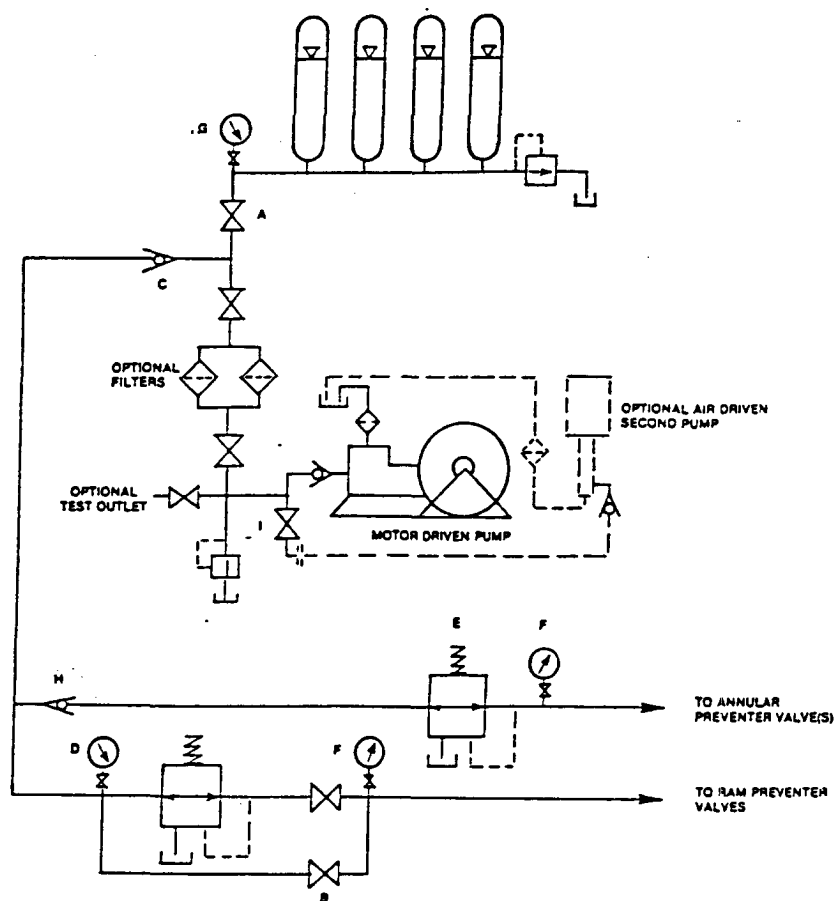


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

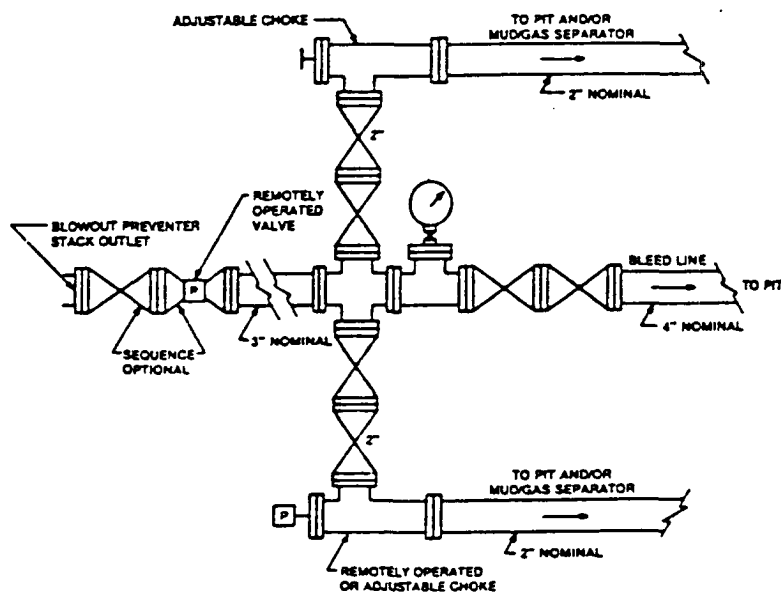
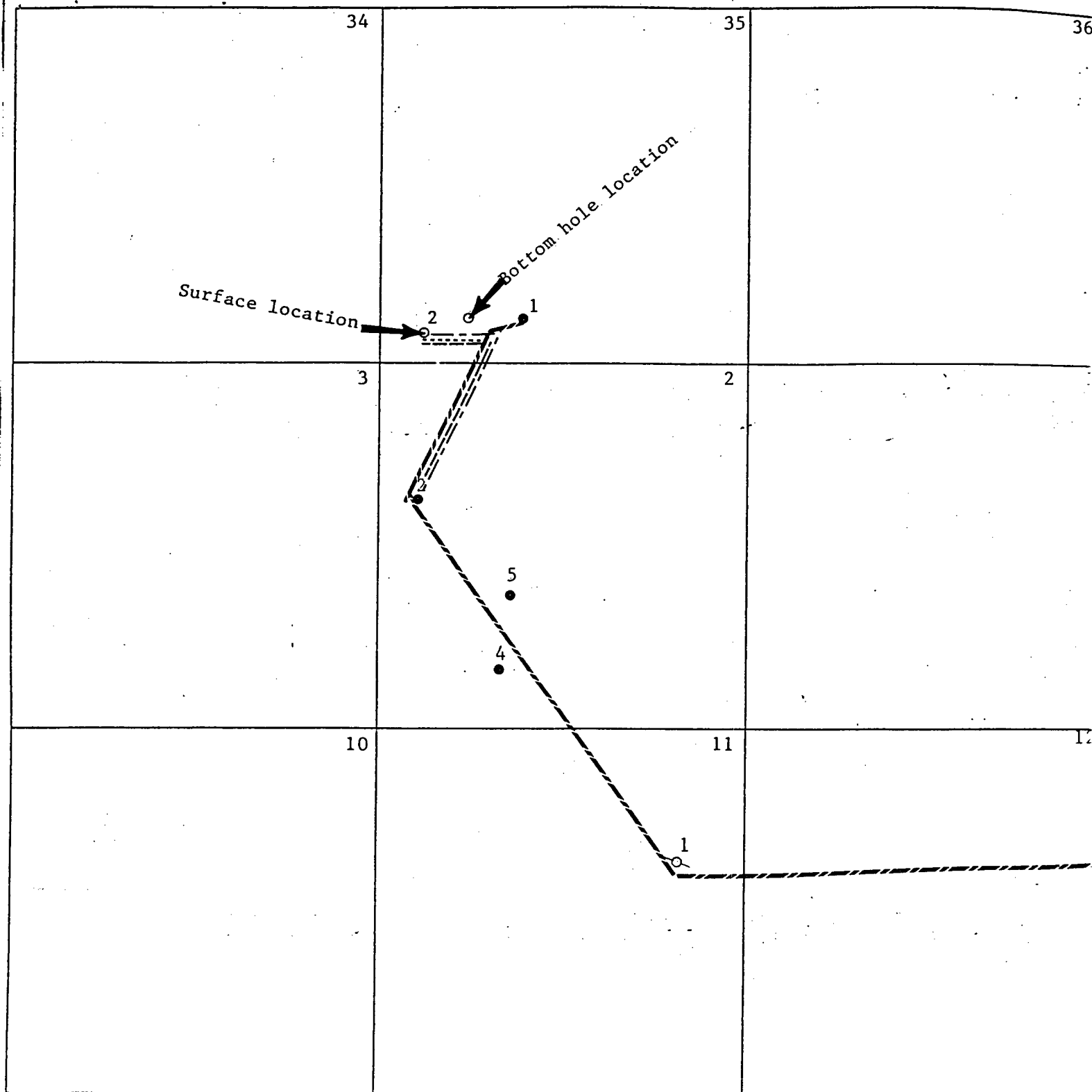


FIGURE K4-2. Typical choke manifold assembly for 3M rated working pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

SAGA PETROLEUM LLC.
GOODNIGHT "35" FEDERAL # 2
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM



EXISTING ROAD 

PROPOSED ROAD 

PROPOSED FLOWLINE 

PROPOSED POWERLINE 

EXHIBIT "F"
POSSIBLE ROUTE OF GAS LINE

SAGA PETROLEUM LLC.
GOODNIGHT "35" FEDERAL # 2
UNIT "M" SECTION 35
T23S-R29E EDDY CO. NM

Company: Saga Petroleum	Date: 2/19/2004	Time: 10:14:14	Page: 1
Field: Goodnight	Co-ordinate(NE) Reference:	Well: #1X Grid North	
Site: Goodnight 35 Fed	Vertical (TVD) Reference:	SITE 0.0	
Well: #1X	Section (VS) Reference:	User (0.00N,0.00E,70.50Azi)	
Wellpath: 1	Plan:	Plan #1	

Field: Goodnight	
Eddy County, NM	
Map System: US State Plane Coordinate System 1927	Map Zone: New Mexico, Eastern Zone
Geo Datum: NAD27 (Clarke 1866)	Coordinate System: Well Centre
Sys Datum: Mean Sea Level	Geomagnetic Model: igrf2000

Site: Goodnight 35 Fed	
Sec 35, T23S, R29E	
Site Position:	Northings: ft
From: Local Only	Easting: ft
Position Uncertainty: 0.00 ft	Latitude: ft
Ground Level: 0.00 ft	Longitude: ft
	North Reference: Grid deg
	Grid Convergence: deg

Well: #1X	Slot Name:
SHL 440 FSL, 660 FWL	
Well Position: +N/-S 0.00 ft	Latitude: ft
+E/-W 0.00 ft	Longitude: ft
Position Uncertainty: 0.00 ft	

Wellpath: 1	Drilled From: Surface
Current Datum: SITE	Tie-on Depth: 0.00 ft
Magnetic Data: 2/19/2004	Above System Datum: Mean Sea Level
Field Strength: 0 nT	Declination: 0.00 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle: 0.00 deg
ft	+N/-S ft
0.00	+E/-W ft
	Direction deg
	70.50

Plan: Plan #1	Date Composed: 2/19/2004
Principal: No	Version: 1
	Tied-to: User Defined

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
9000.00	0.00	70.50	9000.00	0.00	0.00	0.00	0.00	0.00	0.00	
9100.00	0.00	70.50	9100.00	0.00	0.00	0.00	0.00	0.00	0.00	
9276.48	10.59	70.50	9275.48	5.43	15.33	6.00	6.00	0.00	70.50	
12887.01	10.59	70.50	12824.52	226.90	640.75	0.00	0.00	0.00	0.00	
13063.49	0.00	70.50	13000.00	232.33	656.08	6.00	-6.00	0.00	180.00	Target A
14363.49	0.00	70.50	14300.00	232.33	656.08	0.00	0.00	0.00	70.50	

Section 1 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
9000.00	0.00	70.50	9000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9100.00	0.00	70.50	9100.00	0.00	0.00	0.00	0.00	0.00	0.00	70.50

Section 2 : Start Build 6.00

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
9150.00	3.00	70.50	9149.98	0.44	1.23	1.31	6.00	6.00	0.00	0.00
9200.00	6.00	70.50	9199.82	1.75	4.93	5.23	6.00	6.00	0.00	0.00
9250.00	9.00	70.50	9249.38	3.92	11.08	11.76	6.00	6.00	0.00	0.00
9276.48	10.59	70.50	9275.48	5.43	15.33	16.26	6.00	6.00	0.00	0.00

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
9300.00	10.59	70.50	9298.60	6.87	19.40	20.58	0.00	0.00	0.00	0.00
9400.00	10.59	70.50	9396.89	13.00	36.72	38.96	0.00	0.00	0.00	0.00

Company: Saga Petroleum
Field: Goodnight
Site: Goodnight 35 Fed
Well: #1X
Wellpath: 1

Date: 2/19/2004
Co-ordinate(NE) Reference:
Vertical (TVD) Reference:
Section (VS) Reference:
Plan:
Time: 10:14:14
Well: #1X, Grid North
SITE 0.0
User (0.00N, 0.00E, 70.50Az)
Plan #1

Page: 2

Section 3 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N-S ft	+E-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
9500.00	10.59	70.50	9495.19	19.14	54.05	57.34	0.00	0.00	0.00	0.00
9600.00	10.59	70.50	9593.49	25.27	71.37	75.71	0.00	0.00	0.00	0.00
9700.00	10.59	70.50	9691.78	31.41	88.69	94.09	0.00	0.00	0.00	0.00
9800.00	10.59	70.50	9790.08	37.54	106.01	112.46	0.00	0.00	0.00	0.00
9900.00	10.59	70.50	9888.38	43.68	123.34	130.84	0.00	0.00	0.00	0.00
10000.00	10.59	70.50	9986.68	49.81	140.66	149.22	0.00	0.00	0.00	0.00
10100.00	10.59	70.50	10084.97	55.94	157.98	167.59	0.00	0.00	0.00	0.00
10200.00	10.59	70.50	10183.27	62.08	175.30	185.97	0.00	0.00	0.00	0.00
10300.00	10.59	70.50	10281.57	68.21	192.62	204.35	0.00	0.00	0.00	0.00
10400.00	10.59	70.50	10379.86	74.35	209.95	222.72	0.00	0.00	0.00	0.00
10500.00	10.59	70.50	10478.16	80.48	227.27	241.10	0.00	0.00	0.00	0.00
10600.00	10.59	70.50	10576.46	86.61	244.59	259.47	0.00	0.00	0.00	0.00
10700.00	10.59	70.50	10674.76	92.75	261.91	277.85	0.00	0.00	0.00	0.00
10800.00	10.59	70.50	10773.05	98.88	279.23	296.23	0.00	0.00	0.00	0.00
10900.00	10.59	70.50	10871.35	105.02	296.56	314.60	0.00	0.00	0.00	0.00
11000.00	10.59	70.50	10969.65	111.15	313.88	332.98	0.00	0.00	0.00	0.00
11100.00	10.59	70.50	11067.94	117.28	331.20	351.35	0.00	0.00	0.00	0.00
11200.00	10.59	70.50	11166.24	123.42	348.52	369.73	0.00	0.00	0.00	0.00
11300.00	10.59	70.50	11264.54	129.55	365.85	388.11	0.00	0.00	0.00	0.00
11400.00	10.59	70.50	11362.84	135.69	383.17	406.48	0.00	0.00	0.00	0.00
11500.00	10.59	70.50	11461.13	141.82	400.49	424.86	0.00	0.00	0.00	0.00
11600.00	10.59	70.50	11559.43	147.96	417.81	443.24	0.00	0.00	0.00	0.00
11700.00	10.59	70.50	11657.73	154.09	435.13	461.61	0.00	0.00	0.00	0.00
11800.00	10.59	70.50	11756.02	160.22	452.46	479.99	0.00	0.00	0.00	0.00
11900.00	10.59	70.50	11854.32	166.36	469.78	498.36	0.00	0.00	0.00	0.00
12000.00	10.59	70.50	11952.62	172.49	487.10	516.74	0.00	0.00	0.00	0.00
12100.00	10.59	70.50	12050.91	178.63	504.42	535.12	0.00	0.00	0.00	0.00
12200.00	10.59	70.50	12149.21	184.76	521.75	553.49	0.00	0.00	0.00	0.00
12300.00	10.59	70.50	12247.51	190.89	539.07	571.87	0.00	0.00	0.00	0.00
12400.00	10.59	70.50	12345.81	197.03	556.39	590.24	0.00	0.00	0.00	0.00
12500.00	10.59	70.50	12444.10	203.16	573.71	608.62	0.00	0.00	0.00	0.00
12600.00	10.59	70.50	12542.40	209.30	591.03	627.00	0.00	0.00	0.00	0.00
12700.00	10.59	70.50	12640.70	215.43	608.36	645.37	0.00	0.00	0.00	0.00
12800.00	10.59	70.50	12738.99	221.56	625.68	663.75	0.00	0.00	0.00	0.00
12887.01	10.59	70.50	12824.52	226.90	640.75	679.74	0.00	0.00	0.00	0.00

Section 4 : Start Drop -6.00

MD ft	Incl deg	Azim deg	TVD ft	+N-S ft	+E-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
12900.00	9.81	70.50	12837.31	227.67	642.92	682.04	6.00	-6.00	0.00	180.00
12950.00	6.81	70.50	12886.78	230.08	649.73	689.26	6.00	-6.00	0.00	180.00
13000.00	3.81	70.50	12936.56	231.63	654.09	693.89	6.00	-6.00	0.00	180.00
13050.00	0.81	70.50	12986.51	232.30	655.99	695.90	6.00	-6.00	0.00	180.00
13063.49	0.00	70.50	13000.00	232.33	656.08	696.00	6.00	-6.00	0.00	-180.00

Section 5 : Start Hold

MD ft	Incl deg	Azim deg	TVD ft	+N-S ft	+E-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg
13100.00	0.00	70.50	13036.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
13200.00	0.00	70.50	13136.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
13300.00	0.00	70.50	13236.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
13400.00	0.00	70.50	13336.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
13500.00	0.00	70.50	13436.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
13600.00	0.00	70.50	13536.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
13700.00	0.00	70.50	13636.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
13800.00	0.00	70.50	13736.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
13900.00	0.00	70.50	13836.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
14000.00	0.00	70.50	13936.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
14100.00	0.00	70.50	14036.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
14200.00	0.00	70.50	14136.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
14300.00	0.00	70.50	14236.51	232.33	656.08	696.00	0.00	0.00	0.00	70.50
14363.49	0.00	70.50	14300.00	232.33	656.08	696.00	0.00	0.00	0.00	70.50

Company: Saga Petroleum
Field: Goodnight
Site: Goodnight 35 Fed
Well: #1X
Wellpath: 1

Date: 2/19/2004
Co-ordinate(NE) Reference: Well: #1X- Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: User (0.00N,0.00E,70.50Az)
Plan: Plan #1

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Survey

MD ft	Incl deg	Azlm deg	TVD ft	+N/S ft	+E-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
9000.00	0.00	70.50	9000.00	0.00	0.00	0.00	0.00	0.00	0.00	
9100.00	0.00	70.50	9100.00	0.00	0.00	0.00	0.00	0.00	0.00	
9150.00	3.00	70.50	9149.98	0.44	1.23	1.31	6.00	6.00	0.00	
9200.00	6.00	70.50	9199.82	1.75	4.93	5.23	6.00	6.00	0.00	
9250.00	9.00	70.50	9249.38	3.92	11.08	11.76	6.00	6.00	0.00	
9276.48	10.59	70.50	9275.48	5.43	15.33	16.26	6.00	6.00	0.00	
9300.00	10.59	70.50	9298.60	6.87	19.40	20.58	0.00	0.00	0.00	
9400.00	10.59	70.50	9396.89	13.00	36.72	38.96	0.00	0.00	0.00	
9500.00	10.59	70.50	9495.19	19.14	54.05	57.34	0.00	0.00	0.00	
9600.00	10.59	70.50	9593.49	25.27	71.37	75.71	0.00	0.00	0.00	
9700.00	10.59	70.50	9691.78	31.41	88.69	94.09	0.00	0.00	0.00	
9800.00	10.59	70.50	9790.08	37.54	106.01	112.46	0.00	0.00	0.00	
9900.00	10.59	70.50	9888.38	43.68	123.34	130.84	0.00	0.00	0.00	
10000.00	10.59	70.50	9986.68	49.81	140.66	149.22	0.00	0.00	0.00	
10100.00	10.59	70.50	10084.97	55.94	157.98	167.59	0.00	0.00	0.00	
10200.00	10.59	70.50	10183.27	62.08	175.30	185.97	0.00	0.00	0.00	
10300.00	10.59	70.50	10281.57	68.21	192.62	204.35	0.00	0.00	0.00	
10400.00	10.59	70.50	10379.86	74.35	209.95	222.72	0.00	0.00	0.00	
10500.00	10.59	70.50	10478.16	80.48	227.27	241.10	0.00	0.00	0.00	
10600.00	10.59	70.50	10576.46	86.61	244.59	259.47	0.00	0.00	0.00	
10700.00	10.59	70.50	10674.76	92.75	261.91	277.85	0.00	0.00	0.00	
10800.00	10.59	70.50	10773.05	98.88	279.23	296.23	0.00	0.00	0.00	
10900.00	10.59	70.50	10871.35	105.02	296.56	314.60	0.00	0.00	0.00	
11000.00	10.59	70.50	10969.65	111.15	313.88	332.98	0.00	0.00	0.00	
11100.00	10.59	70.50	11067.94	117.28	331.20	351.35	0.00	0.00	0.00	
11200.00	10.59	70.50	11166.24	123.42	348.52	369.73	0.00	0.00	0.00	
11300.00	10.59	70.50	11264.54	129.55	365.85	388.11	0.00	0.00	0.00	
11400.00	10.59	70.50	11362.84	135.69	383.17	406.48	0.00	0.00	0.00	
11500.00	10.59	70.50	11461.13	141.82	400.49	424.86	0.00	0.00	0.00	
11600.00	10.59	70.50	11559.43	147.96	417.81	443.24	0.00	0.00	0.00	
11700.00	10.59	70.50	11657.73	154.09	435.13	461.61	0.00	0.00	0.00	
11800.00	10.59	70.50	11756.02	160.22	452.46	479.99	0.00	0.00	0.00	
11900.00	10.59	70.50	11854.32	166.36	469.78	498.36	0.00	0.00	0.00	
12000.00	10.59	70.50	11952.62	172.49	487.10	516.74	0.00	0.00	0.00	
12100.00	10.59	70.50	12050.91	178.63	504.42	535.12	0.00	0.00	0.00	
12200.00	10.59	70.50	12149.21	184.76	521.75	553.49	0.00	0.00	0.00	
12300.00	10.59	70.50	12247.51	190.89	539.07	571.87	0.00	0.00	0.00	
12400.00	10.59	70.50	12345.81	197.03	556.39	590.24	0.00	0.00	0.00	
12500.00	10.59	70.50	12444.10	203.16	573.71	608.62	0.00	0.00	0.00	
12600.00	10.59	70.50	12542.40	209.30	591.03	627.00	0.00	0.00	0.00	
12700.00	10.59	70.50	12640.70	215.43	608.36	645.37	0.00	0.00	0.00	
12800.00	10.59	70.50	12738.99	221.56	625.68	663.75	0.00	0.00	0.00	
12887.01	10.59	70.50	12824.52	226.90	640.75	679.74	0.00	0.00	0.00	
12900.00	9.81	70.50	12837.31	227.67	642.92	682.04	6.00	-6.00	0.00	
12950.00	6.81	70.50	12886.78	230.08	649.73	689.26	6.00	-6.00	0.00	
13000.00	3.81	70.50	12936.56	231.63	654.09	693.89	6.00	-6.00	0.00	
13050.00	0.81	70.50	12986.51	232.30	655.99	695.90	6.00	-6.00	0.00	
13063.49	0.00	70.50	13000.00	232.33	656.08	696.00	6.00	-6.00	0.00	
13100.00	0.00	70.50	13036.51	232.33	656.08	696.00	0.00	0.00	0.00	
13200.00	0.00	70.50	13136.51	232.33	656.08	696.00	0.00	0.00	0.00	
13300.00	0.00	70.50	13236.51	232.33	656.08	696.00	0.00	0.00	0.00	
13400.00	0.00	70.50	13336.51	232.33	656.08	696.00	0.00	0.00	0.00	
13500.00	0.00	70.50	13436.51	232.33	656.08	696.00	0.00	0.00	0.00	
13600.00	0.00	70.50	13536.51	232.33	656.08	696.00	0.00	0.00	0.00	

Company: Saga Petroleum
 Field: Goodnight
 Site: Goodnight 35 Fed
 Well: #1X
 Wellpath: 1

Date: 2/19/2004
 Co-ordinate(NE) Reference: Well: #1X, Grid North
 Vertical (TVD) Reference: SITE 0.0
 Section (VS) Reference: User (0.00N,0.00E,70.50Az)
 Plan: Plan #1

Page: 4

Survey

MD ft	Incl deg	Azim deg	TVD ft	+N-S ft	+E-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
13700.00	0.00	70.50	13636.51	232.33	656.08	696.00	0.00	0.00	0.00	
13800.00	0.00	70.50	13736.51	232.33	656.08	696.00	0.00	0.00	0.00	
13900.00	0.00	70.50	13836.51	232.33	656.08	696.00	0.00	0.00	0.00	
14000.00	0.00	70.50	13936.51	232.33	656.08	696.00	0.00	0.00	0.00	
14100.00	0.00	70.50	14036.51	232.33	656.08	696.00	0.00	0.00	0.00	
14200.00	0.00	70.50	14136.51	232.33	656.08	696.00	0.00	0.00	0.00	
14300.00	0.00	70.50	14236.51	232.33	656.08	696.00	0.00	0.00	0.00	
14363.49	0.00	70.50	14300.00	232.33	656.08	696.00	0.00	0.00	0.00	



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

Joanna Prukop
Cabinet Secretary
Acting Director
Oil Conservation Division

21 April 2004

File
Copy

Saga Petroleum Limited Liability Co.
415 West Wall, Suite 1900
Midland, Texas 79701

RE: Pit Permit Required -

Goodnight "35" Federal #2 440 FSL & 660 FWL SEC-35 T-23S R-29E

The Oil Conservation Division of Artesia is in receipt of your application to drill. Construction of a pit(s) for the purpose of drilling may not commence until the requirements of O.C.D. Rule 19.15.2.50 (Pit and Below-Grade Tanks) are satisfied.

If I may be of any assistance, please feel free to call (505) 748-1283 ext. 109.

Sincerely,

Van Barton

A handwritten signature, possibly "B", in the bottom right corner of the page.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

April, 8, 2004
New Mexico State Land Office
Oil, Gas and Minerals Division
P.O. Box 1148
Santa Fe, NM 87504-1148
Attn: Joe Mraz or To Whom It May Concern

RECEIVED

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA APR 15 2004

OPERATOR: Saga Petroleum, L.L.C.
LEASE NAME: Goodnight '35' Federal # 2
LOCATION: SEC. 35, TOWNSHIP 23 SOUTH, RANGE 29 EAST,
660' FWL & 440' FSL, Surface Hole Location
EDDY COUNTY, NM, NMPM

OCD-ARTESIA

PROPOSED DEPTH: 14,100'

Dear Mr. Mraz or To Whom It May Concern,

The application for permit to drill identified above has been filed with this office of the New Mexico Oil Conservation Division. Pursuit to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether or not this application is within an established Life-of-Mine Reserve area filed with and approved by your office. If not, please advise whether it is within the buffer zone established by this order.

Thank you for your assistance.

Sincerely,

Bryan G. Arrant
PES, District II Artesia NMOC

In LMR Yes _____
In Buffer Zone Yes _____

No X
No X

J. Mraz
4-12-04

Comments:

Signature: _____

Date: 4/12/04



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

April, 8, 2004
Bureau of Land Management
620 East Greene St.
Carlsbad, NM 88220-6292
Attn: Craig Cranston or To Whom It May Concern

RECEIVED

APR 15 2004

OCD-ARTESIA

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA

OPERATOR: Saga Petroleum, L.L.C.
LEASE NAME: Goodnight '35' Federal # 2
LOCATION: SEC. 35, TOWNSHIP 23 SOUTH, RANGE 29 EAST,
660' FWL & 440' FYL
EDDY COUNTY, NM, NMPPM

PROPOSED DEPTH: 14,100'

Dear Craig or To Whom It May Concern,

The application for permit to drill identified above has been filed with this office of the New Mexico Oil Conservation Division. Pursuit to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether or not this application is within an established Life-of-Mine Reserve area filed with and approved by your office. If not, please advise whether it is within the buffer zone established by this order.

Thank you for your assistance.

Sincerely,

Bryan G. Arrant
PES, District II Artesia NMOCD

In LMR	Yes _____	No ☒
In Buffer Zone	Yes _____	No ☒

Comments:

Signature: [Signature] BLM Date: 4-13-04