

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Submit to appropriate District Office

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

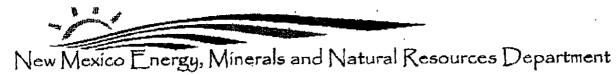
☐ AMENDED REPORT

Form C-101

May 27, 2004

APPI	LICATI	ON FO		TO DRILL,	RE-ENT	ER, D	EEPE	N, PLUC	BAC	CK, OR AD	D A ZONE
			Operator Name							² OGRID Numbe 8041	er
	Forest Oil Corporation 707 17 th Street, Suite 3600 Denver, Co 80202							30 -	015	API Number	<u>'</u>
Property Code Property								130-	015		ell No.
37	<u>098</u>			F	OKstate -B						10
			Proposed Pool 1 g Jackson;SR-Q-0	7.04	• (10 Propo	sed Pool 2	
<u> </u>	· · · · · · · · · · · · · · · · · · ·	Grayou	g Jackson, 317-Q-0		rface Loca	ation					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the		South line	Feet from	the	East/West line	County
P	16	17S	31E	P	1155	1	outh	110	_ :]	East	Eddy
			⁸ Propo	sed Bottom Hole	Location I	Differer	nt From	Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/S	South line	Feet from	the	East/West line	County
l	J		<u> </u>	Addition	al Well In	formati	on		L		I
1	Type Code		12 Well Type Cod Oil	e	13 Cable/Rotary		14	Lease Type C State	ode	¹⁵ Gro	und Level Elevation 3853
	ew fultiple		17 Proposed Dept	h	Rotary 18 Formation			19 Contractor			²⁰ Spud Date
	N		4100		Grayburg			Lantern 2			3-1-08
Depth to Grou	ındwater >10	 IO*		Distance from nea	rest fresh wate 5000'	r well		Distan		nearest surface w	/ater
Pit: Liner	: Synthetic		ils thick Clay [Pit Volume:	bbls		Drilling M	<u>lethod:</u>			
Close	d-Loop Syst	tem 💢		•	•			☐ Brine	Dies	el/Oil-based	Gas/Air
		7	21	Proposed Cas	ing and C	ement l	Prograi	m	``	_	
Hole S	ize	Cas	ng Size	Casing weight/fo		Setting De		1	of Cen	nent	Estimated TOC
12.2	5	8	.625	24#		X O:			310		0
7.87	5		5.5	17#		4100'		640			0
						-		/			
22 Da - 11 - 41		¥-	No. 1	Surface	=)	85-	450				new productive zone.
				additional sheets if							
_									٠		-
Opera	iter T	ic se	7. Sulfa	LLE CESINE	ina	nhyr	12 ITE	ce ci	icn	of Rus	Tler.
				ue and complete to	the					ON DIVIS	
best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines , a general permit , or an (attached) alternative OCD approved plan .						oved by:		DDVA	J 8.	ARRANT	
Printed name:	Cindy Bus	K		محميد	Title:					ii geolo	GIST
Title: Sr. Reg	ulatory Tecl				Appr	oval Date:	4-7-	08	Exp	oiration Date: 4	-7-20/10
E-mail Addres	s: <u>cabush@</u>	forestoil.co	m								
Date: 1-29-08	Date: 1-29-08 Phone: 303-812-1554					Conditions of Approval Attached					

I OI GSF OII



Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Feemire Division Director Oil Conservation Division



April 1, 2008

Mr. James Bruce P.O. Box 1056 Santa Fe, NM 87504

Administrative Order NSL-5804

Forest Oil Corporation Re: FOC State B Well No. 10 1100 feet FSL and 150 feet FEL Unit P. Section 16-17S-31E **Eddy County**

> **Forest Oil Corporation** FOC State B Well No. 11 150 feet FSL and 1450 feet FEL Unit O, Section 16-17S-31E **Eddy County**

Forest Oil Corporation FOC State B Well No. 12 150 feet FSL and 150 feet FEL Unit P, Section 16-17S-31E **Eddy County**

Dear Mr. Bruce:

Reference is made to the following:

- (a) your application (administrative application reference No. pKVR08-06040317) submitted to the New Mexico Oil Conservation Division (the Division) in Santa Fe, New Mexico, on behalf of Forest Oil Corporation (Forest) on February 29, 2008, and
 - (b) the Division's records pertinent to this request.

5059822151

JAMESBRUCE

April 1, 2008 Page 2

Forest has requested to drill the above-referenced wells at unorthodox well locations, as described above, in Section 16, Township 17 South, Range 31 East, N.M.P.M., in Eddy County, New Mexico. The SE/4 SE/4 of Section 16 will be dedicated to the FOC State B Well No. 10 and the FOC State B Well No. 12, and the SW/4 SE/4 of Section 16 will be dedicated to the FOC State B Well No. 11, in order to form standard 40-acre spacing units in the Grayburg-Jackson-Seven Rivers/Queen/Grayburg/San Andres Pool (28509). This pool is governed by statewide Rule 104.B(1), which provides for 40-acre units, with wells located at least 330 feet from a unit outer boundary. Each of these locations is less than 330 feet from a unit boundary.

Your application on behalf of Forest has been duly filed under the provisions of Division Rules 104.F and 1210.A(2).

It is our understanding that you are seeking this location because Forest's geologic interpretation indicates that the wells can tap into stranded reserves located on the margins of existing spacing units that cannot be effectively drained by wells located at standard locations.

It is also understood that notice of this application to offsetting operators or owners is unnecessary because Forest owns 100% of the working interest in all of the offsetting spacing units towards which these locations encroach.

Pursuant to the authority conferred by Division Rule 104.P(2), the above-described unorthodox locations are hereby approved.

This approval is subject to your being in compliance with all other applicable Division rules, including, but not limited to Division Rule 40.

Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

Mark E. Fesmire, P.E.

Director

MEF/db

cc: New Mexico Oil Conservation Division - Artesia
New Mexico State Land Office - Santa Fe
United States Bureau of Land Management - Carlsbad

.

Apr 07 2008 9:54

2000/AFR/U//MUN 12:22

JAMESBRUCE

5059822151

JAMES BRUCE
Attorney at Law
Post Office Box 1056
Santa Fe, New Mexico 87504
Telephone: (505) 982-2043
Fax: (505) 982-2151

°ax: (505) 982-215 <u>jemesbruc@aol.com</u>

DELIVER TO: Bruce A. Rush

COMPANY: Forest Oil Corp.

CITY: Denver, Colorado

FAX NUMBER: (303) 812-1590

PAGES: 3 (including cover sheet)

DATE: 4/7/08

MEMO:

CONFIDENTIALITY NOTICE

This transmission contains information which may be confidential or legally privileged. The information is intended only for the named recipient. If you are not the intended recipient, copying or distribution of the information is prohibited. If you have received this transmission in error, please call as and return the document to us. Thank you.

State of New Mexico

DISTRICT I 1525 N. PRENCE DR., BOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II

DISTRICT IV

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III

OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

1220 S. ST. FRANCIS DR., SANTA FE, NM 8750	WELL LOCATION AND	ACKEAGE DEDICATION I LAI	☐ AMENDED REPORT
API Number	Pool Code	Pool Name	
1	28509	Grayburg Jackson; SR-Q-G-SA	1
Property Code	Pro	9-ty Name	Well Number
	FOC	STATE R	10
OGRID No.		ator Name	Elevation
8041	FOREST OIL	CORPORATION	3853'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Р	16	17-S	31-E	-	1155	SOUTH	110	EAST	EDDY

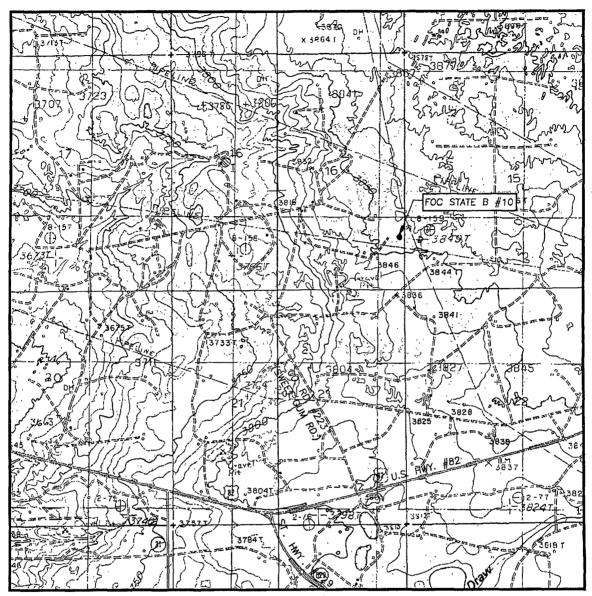
Bottom Hole Location If Different From Surface

ſ	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
-							;			
Ĩ	Dedicated Acres Joint or Infill		r Infill Co	nsolidation (ode Ord	der No.	1,4,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1			
	40 .			С						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OR A NON-STAR	DARD UNIT HAS BEEN APPROVED BY THE	E DIVISION
GEODETIC COORDINATES NAD 27 NME Y=666123.1 N X=643574.8 E LAT.=32*49'49.39" N LONG.=103*51'57.32" W	·	OPERATOR CERTIFICATION I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature Date Cindy Bush Printed Name 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.
110'		MARCH 2, 2006 Date Surveyed JR Signature Seal Form Professional Surveyors ME ME 06.11.0411 Certificate, No. GARY EDISON 12841

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. 16 TWP. 17—S RGE. 31—E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1155' FSL & 110' FEL

ELEVATION 3853'
FOREST OIL

OPERATOR CORPORATION

LEASE FOC STATE B

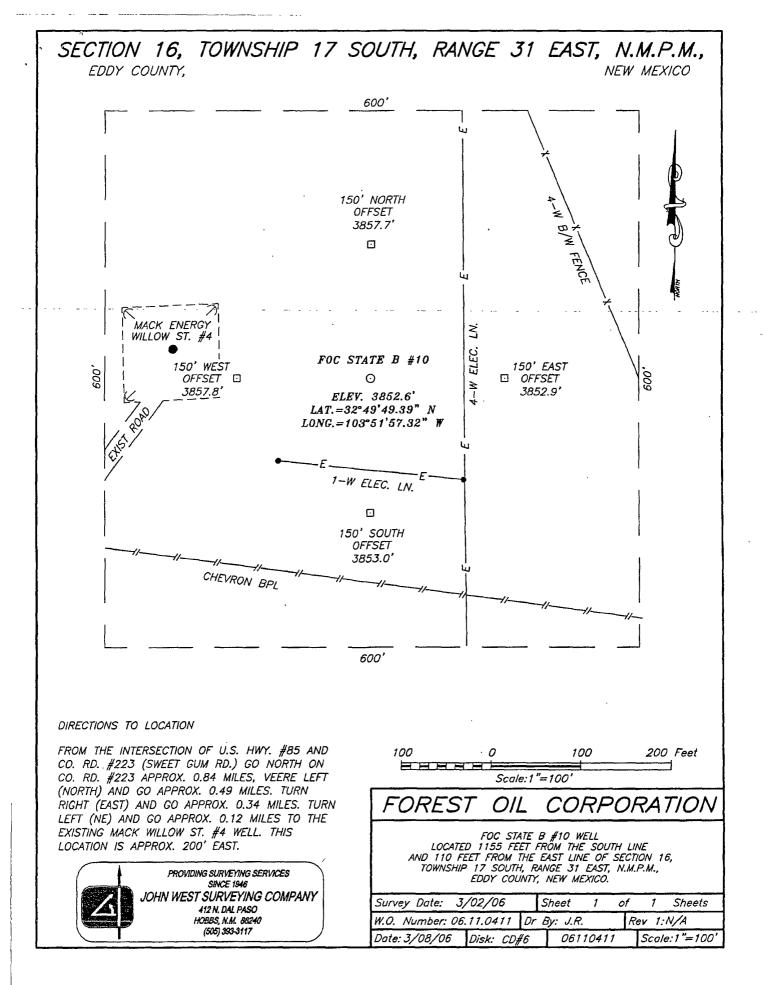
U.S.G.S. TOPOGRAPHIC MAP

MALJAMAR, N.M.

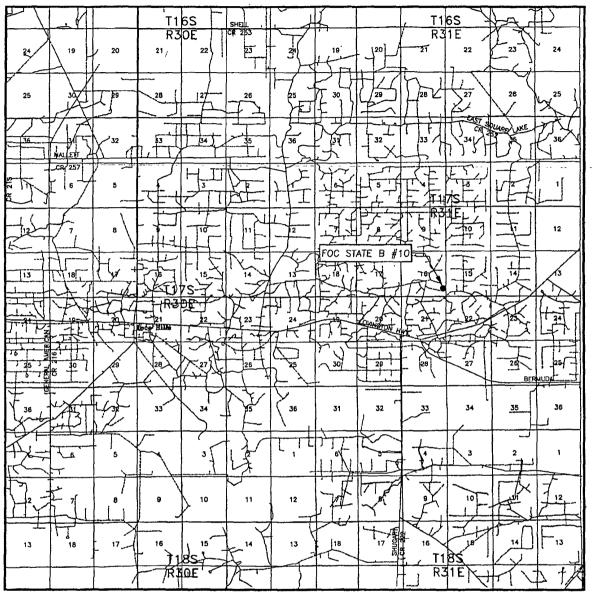
CONTOUR INTERVAL: MALJAMAR, N.M. — 10' LOCO HILLS, N.M. — 10'







VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 16 7	WP. <u>17-S</u> RGE, <u>31-E</u>
SURVEY	N.M.P.M.
COUNTYE	DDY EDDY NEW MEXICO
DESCRIPTION	1155' FSL & 110' FEL
ELEVATION_	<u>3853'</u>
OPERATOR_	FOREST OIL CORPORATION
LEASE	FOC STATE B



PROVIDING SURVEYING SERVICES SINCE 1946 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS, N.M. 88240 (505) 393-3117

Exhibit "A"

40 Acre Communitized Area

Forest Oil Corp.- 100%
Lease No.-ST NM B 2613
HBP
(20.0 acres)
Sec. 16:SENESE, NESESE

Tract 2

Forest Oil Corp.- 100%
Lease No-NM LC029420 A
HBP
(20.0 acres)
Sec. 15:SWNWSW, NWSWSW

Tract 1

Plat of communitized area covering SWNWSW, NWSWSW Section 15, SENESE, NESESE Section 16, T17S - R31E Eddy County, New Mexico

Communitized Boundary

ONLINE version December 2004 State/Fed/Fee

6

FOREST OIL CORPORATION - WELL PLAN

STATE B #10

DATE:01/25/08

WELL NAME

LEASE: SURFACE LOCATION: 1155' FSL & 110' FEL. Section 16, T17S, R31E - Eddy County

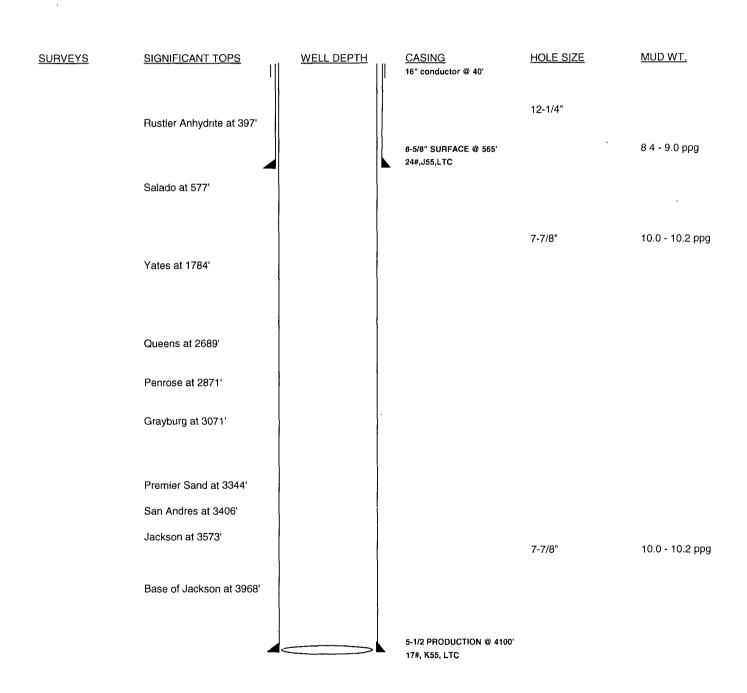
BOTTOM HOLE LOCATION: STRAIGHT HOLE

TOTAL DEPTH: 4100' MD / 4100' TVD

ELEV.: 3853' GL.

WD: N/A

THE SUBJECT WELL WILL TEST The Grayburg Jackson





Forest Oil Corp. STATE B #10

GRAYBURG JACKSON Field SEC16 T17S R31E Eddy County, New Mexico January 25, 2008

Well Proposal

Prepared for:

Todd McDonald Forest Oil

Bus Phone: 303.812.1744

Email: tsmcdonald@forestoil.com

Prepared by:

Zac Hernandez Region Engineer Artesia, New Mexico

Mobile: 505.513.2297



Service Point:

Artesia

Bus Phone: (505) 746-3140 Fax: (505) 746-2293 Service Representatives:

Gordon Reid Senior Account Manager Denver, Colorado Operator Name: Forest Oil Corp. Well Name:

STATE B #10

Job Description: 8 5/8" casing @ 565' feet.

Date:

January 25, 2008



Proposal No: 180656281C

JOB AT A GLANCE

565 ft Depth (TVD)

565 ft Depth (MD)

Hole Size 12.25 in

8 5/8 in, 24 lbs/ft Casing Size/Weight:

Pump Via 8 5/8" O.D. (8.097" .I.D) 24

2,400 gals **Total Mix Water Required**

Lead Slurry

110 sacks 35:65:6 Class C 12.5:2.0 12.5 ppg **Density** Yield 1.98 cf/sack

Tail Slurry

Class C 200 sacks **Density** 14.8 ppg 1.34 cf/sack Yield

Displacement

Water 33 bbls Operator Name: Forest Oil Corp.

Well Name: STATE B #10

Job Description: 8 5/8" casing @ 565' feet.

Date:

January 25, 2008



Proposal No: 180656281C

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D.	DEPTH(ft)				
(in)	MEASURED	TRUE VERTICAL			
12.250 HOLE	565	565			

SUSPENDED PIPES

DIAMET	ER (in)	WEIGHT	DEP	DEPTH(ft)		
O.D. I.D.		(lbs/ft)	MEASURED	TRUE VERTICAL		
8.625	8.097	24	565	565		

Float Collar set @ 525 ft **Mud Density** 8.50 ppg Water Based **Mud Type** 84 ° F Est. Static Temp. 80 ° F Est. Circ. Temp.

VOLUME CALCULATIONS

257 ft	X	0.4127 cf/ft	with	100 % excess	=	211.7 cf
308 ft	x	0.4127 cf/ft	with	100 % excess	=	254.6 cf

40 ft 14.3 cf (inside pipe) 0.3576 cf/ft with 0 % excess

> TOTAL SLURRY VOLUME = 480.7 cf

86 bbls

Job Description: 8 5/8" casing @ 565' feet.

Date: January 25, 2008



Proposal No: 180656281C

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR AMOUNT AND TYPE OF CEMENT	····
Lead Slurry	212	 1 1.98 = 110 sacks (35:65) Poz (Fly Ash):Class C 2% bwoc Calcium Chloride + 0.25 lbs/sac Flake + 5 lbs/sack LCM-1 + 6% bwoc Ber 98.4% Fresh Water 	k Cello
Tail Slurry	269	1 1.34 = 200 sacks Class C Cement + 2% bwoc Conclude + 56.4% Fresh Water	alcium
Displacement		33.4 bbls Water	
CEMENT PROPERTIE	S		
		SLURRY SLURRY NO. 1 NO. 2	
Slurry Weight (ppg)		12.50 14.80	
Slurry Yield (cf/sack)		1.98 1.34	
Amount of Mix Water (g	os)	10.27 6.36	

Job Description: 8 5/8" casing @ 565' feet.

Date:

January 25, 2008



Proposal No: 180656281C

PRICE ESTIMATE

Product Material

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT		
272	94lbs	Class C Cement	27.80	7,561.60		2,873.41		
568	lbs	Calcium Chloride	1.04	590.72	62.0	224.47		
575	lbs	Bentonite	0.42	241.50	62.0	91.77		
550	lbs	LCM-1	0.98	539.00	62.0	204.82		
28	lbs	Cello Flake	4.14	115.92	62.0	44.05		
39	74lbs	Poz (Fly Ash)	11.25	438.75	62.0	166.73		
1	ea	Cement Plug, Rubber, Top 8-5/8 in	249.00	249.00	62.0	94.62		
	Product Material Subtotal: \$9,736.49 \$							

Service Charges

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT	
1	ea	Personnel Surcharge - Cement Svc	145.50	145.50	62.0	55.29	
344	cu ft	Bulk Materials Service Charge	3.41	1,173.04	62.0	445.76	
	Service Charges Subtotal: \$1,318.54						

Equipment

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT
1	4hrs	Cement Pump Casing, 0 - 1000 ft	2,080.00	2,080.00	62.0	790.40
1	job	Fas-Lok Cement Head	515.00	515.00	62.0	195.70
1	job	Data Acquisition, Cement, Standard	1,335.00	1,335.00	62.0	507.30
70	miles	Mileage, Heavy Vehicle	7.40	518.00	62.0	196.84
70	miles	Mileage, Auto, Pick-Up or Treating Van	4.20	294.00	62.0	111.72
		Equipment S	ubtotal:	\$4,742.00		\$1,801.96

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.

The technical data contained in this proposal is based on the best information available at the time of writing and is subject to further analysis and testing. The pricing data contained in this proposal are estimates only and may vary depending on the work actually performed. Pricing does not include federal, state and local taxes or royalties.

This quotation is based on BJ Services Company being awarded the work on a first call basis and within thirty (30) days of the proposal date. These prices will be subject to review if the work is done after thirty (30) days from the proposal date, or on a second or third call basis.

Job Description: 8 5/8" casing @ 565' feet.

Date:

January 25, 2008



Proposal No: 180656281C

PRICE ESTIMATE

Freight/Delivery Charges

			TOTAL -	¢17,000,70		¢¢ 407 F0
		Freight/Delivery Charges	Subtotal:	\$1,301.69		\$494.64
527	tonmi	Bulk Delivery, Dry Products	2.47	1,301.69	62.0	494.64
QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT

TOTAL: \$17,098.72 \$6,497.52

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.

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Job Description: 5 1/2" casing @ 4,100' feet.

Date:

January 25, 2008



Proposal No: 180656281C

JOB AT A GLANCE

Depth (TVD) 4,100 ft

Depth (MD) 4,100 ft

Hole Size 7.875 in

Casing Size/Weight: 5 1/2 in, 17 lbs/ft

Pump Via 5 1/2" O.D. (4.892" .I.D) 17

Total Mix Water Required 4,637 gals

Lead Slurry

 35:65:6 Class C 12.5:2.0
 165 sacks

 Density
 12.5 ppg

 Yield
 2.04 cf/sack

Tail Slurry

 50:50:2 Class C
 475 sacks

 Density
 14.2 ppg

 Yield
 1.30 cf/sack

Displacement

Water 94 bbls

Job Description: 5 1/2" casing @ 4,100' feet.

Date:

January 25, 2008



Proposal No: 180656281C

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D.	DEPŢH(ft)				
(in)	MEASURED	TRUE VERTICAL			
8.097 CASING	565	565			
7.875 HOLE	4,100	4,100			

SUSPENDED PIPES

DIAMET	ER (in)	WEIGHT	DEP'	TH(ft)
O.D. I.D.		(lbs/ft)	MEASURED	TRUE VERTICAL
5.500	4.892	17	4,100	4,100

Float Collar set @ 4,060 ft

Mud Density 9.00 ppg

Mud Type Water Based

Est. Static Temp. 112 ° F

Est. Circ. Temp. 99 ° F

VOLUME CALCULATIONS

565 ft	Х	0.1926 cf/ft	with	0 % excess	=	108.8 cf
935 ft	X	0.1733 cf/ft	with	35 % excess	=	218.7 cf
2,600 ft	x	0.1733 cf/ft	with	35 % excess	=	608.1 cf
40 ft	X	0.1305 cf/ft	with	0 % excess	=	5.2 cf (inside pipe)

TOTAL SLURRY VOLUME = 940.9 cf

= 168 bbls

Job Description: 5 1/2" casing @ 4,100' feet.

Date:

January 25, 2008



Proposal No: 180656281C

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR AMOUNT AND TYPE OF CEMENT
Lead Slurry	328	 1 2.04 = 165 sacks (35:65) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 6% bwoc Bentonite + 107.8% Fresh Water
Tail Slurry	613	/ 1.30 = 475 sacks (50:50) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 1% bwoc FL-25 + 2% bwoc Bentonite + 58.2% Fresh Water
Displacement		94.4 bbls Water
CEMENT PROPERTIE	ES	
		SLURRY SLURRY NO. 1 NO. 2
Slurry Weight (ppg) Slurry Yield (cf/sack)		12.50 14.20 2.04 1.30
Amount of Mix Water (g	ps)	11.24 5.86

Job Description: 5 1/2" casing @ 4,100' feet.

Date:

January 25, 2008



Proposal No: 180656281C

PRICE ESTIMATE

Product Material

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT	
345	94lbs	Class C Cement	27.80	9,591.00	62.0	3,644.58	
1660	lbs	Bentonite	0.42	697.20	62.0	264.94	
160	lbs	Cello Flake	4.14	662.40	62.0	251.71	
296	74lbs	Poz (Fly Ash)	11.25	3,330.00	62.0	1,265.40	
1932	lbs	Sodium Chloride	0.41	792.12	62.0	301.01	
1	ea	Cement Plug, Rubber, Top 5-1/2 in	125.00	125.00	62.0	47.50	
399	lbs	FL-25	18.35	7,321.65	62.0	2,782.23	
	Product Material Subtotal: \$22,519.37						

Service Charges

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT
1	ea	Personnel Surcharge - Cement Svc	145.50	145.50	62.0	55.29
717	cu ft	Bulk Materials Service Charge	3.41	2,444.97	62.0	929.09
		Service Charges	\$2,590.47		\$984.38	

Equipment

QTY	UNIT	PRODUCT DESCRIPTION	UNIT. PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT		
1	6hrs	Cement Pump Casing, 4001 - 5000 ft	4,175.00	4,175.00	62.0	1,586.50		
1	job	Fas-Lok Cement Head	515.00	515.00	62.0	195.70		
1	job	Data Acquisition, Cement, Standard	1,335.00	1,335.00	62.0	507.30		
70	miles	Mileage, Heavy Vehicle	7.40	518.00	62.0	196.84		
70	miles	Mileage, Auto, Pick-Up or Treating Van	4.20	294.00	62.0	111.72		
1	job	Field Storage Bin	1,035.00	1,035.00	62.0	393.30		
	Equipment Subtotal: \$7,872.00 \$2,991.							

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.

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Job Description: 5 1/2" casing @ 4,100' feet.

Date:

January 25, 2008



Proposal No: 180656281C

PRICE ESTIMATE

Freight/Delivery Charges

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT
1023 to	nmi	Bulk Delivery, Dry Products	2.47	2,526.81	62.0	960.19
		Freight/Delivery Charges S	ubtotal:	\$2,526.81		\$960.19

TOTAL: \$35,508.65 \$13,493.30

Customer will be charged for all 'SPECIAL PROPPANTS' delivered to location, whether they are pumped or not. All proppants other than standard grade frac sand are considered 'SPECIAL PROPPANTS'.

The technical data contained in this proposal is based on the best information available at the time of writing and is subject to further analysis and testing. The pricing data contained in this proposal are estimates only and may vary depending on the work actually performed. Pricing does not include federal, state and local taxes or royalties.

This quotation is based on BJ Services Company being awarded the work on a first call basis and within thirty (30) days of the proposal date. These prices will be subject to review if the work is done after thirty (30) days from the proposal date, or on a second or third call basis.



CONDITIONS

BJ Services' performance of services and sale of materials is expressly conditioned upon the applicability of the Terms and Conditions contained in the current BJ Services Price Book. The Terms and Conditions include, among other things, an indemnity in favor of BJ Services from Customer for damage to the well bore, reservoir damage, loss of the hole, blowouts and loss of control of the well, even if caused by the negligence or other fault of BJ Services. The Terms and Conditions also limit the warranties provided by the BJ Services and the remedies to which Customer may be entitled in the event of a breach of warranty by BJ Services. For these reasons, we strongly recommend that you carefully review a copy of the Terms and Conditions. If you do not have a copy of the BJ Services Price Book, you can view the Terms and Conditions on BJ Services Web Site, www.bjservices.com. By requesting that BJ Services perform the services described herein, Customer acknowledges that such Terms and Conditions are applicable to the services. Further, by requesting the services, Customer warrants that its representative on the well location or other service site will be fully authorized to acknowledge such Terms and Conditions by executing a Field Receipt or other document presented by BJ Services containing such Terms and Conditions.

In the event that Customer and BJ Services have executed a Master Services Agreement covering the work to be performed, such Master Services Agreement shall govern in place of the Terms and Conditions. If you are interested in entering into Master Services Agreement with BJ Services, please contact us through the "Go BJ" button on the BJ Services Web Site.

Report Printed on JAN-25-08 02 04 Grid175

Operator: Forest Oil Corp.
Well Name: STATE B #10
Date: January 25, 2008

B

Proposal No: 180656281C

PRODUCT DESCRIPTIONS

Bentonite

Commonly called gel, it is a clay material used as a cement extender and to control excessive free water.

Calcium Chloride

A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development.

Calcium Chloride

A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development.

Cello Flake

Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.

Class C Cement

Intended for use from surface to 6000 ft., and for conditions requiring high early strength and/or sulfate resistance.

FL-25

An all purpose salt-tolerant fluid loss additive that provides exceptional fluid loss control across a wide range of temperatures and salinity conditions and remedial cementing applications.

LCM-1

A graded (8 to 60 mesh) naturally occurring hydrocarbon, asphaltite. It is used as a lost circulation material at low to moderate temperatures and will act as a slurry extender. Cement compressive strength is reduced.

Poz (Fly Ash)

A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement.

Sodium Chloride

At low concentrations, it is used to protect against clay swelling. At high concentrations, it is used to increase the

January 25, 2008



Proposal No: 180656281C

End of Report

Drilling Fluids Proposal Forest Oil Corporation FOC State B - #10

Casing Hole Size Size (in) (in)	Casing Program	Depth (ft) MD	Formation Tops (ft)	Mud System	Mud Weight (ppg)	Sum Days	46.4
8-5/8" 12-1/4"		565	Surface Hole Rustler Anhydrite	M-I-Gel Spud Mud	8.4 - 8.8	2	
		580°	Salado	Brine Water	9.9 – 10.0		
		2689' 2871' 3071'	Queens Penrose Grayburg	Salt Gel / My LO Gel	10.0 – 10.2		
		3344°,	Premier Sand San Andres				
5-1/2" 7-7/8"		3573' 3968' 4100'	Jackson Base of Jackson Total Depth			12	

Drilling Fluids Proposal

Forest Oil Corporation FOC State B - #10

12-1/4	l" - (0 − 565' MD) - 8-5/8" Casing
Drilling Fluid System	Fresh Water / M-I Gel Spud Mud
Key Products	M-I GEL, Soda Ash, Lime, Drilling Paper, Fibrous LCM
Solids Control	Shaker, Desander, Desilter
Potential Problems	Hole Cleaning, Seepage Losses, Possible Lost Circulation

Interval Drilling Fluid Properties								
Depth	Mud	Funnel	Plastic	Yield	API	Drill		
interval (ft)	Weight (ppg)	Viscosity Sec/qt	Viscosity (cp)	Point (Ib/100ft²)	Fluid Loss (ml/30min)	Solids (%)		
0365°	8.4 - 8.8	26 - 32	2 - 4	3 - 5	NC	1-4		

- Fill the mixing pit with fresh water. Check water for contamination and if necessary treat with soda ash to better pre-hydrate gel.
- Add 20 25 lb/bbl gel. Sweep hole every 150' 200' with pre-mixed gel.
- Maintain a PH of 9.5 10.0 with lime.
- At TD, prior to tripping to running casing, sweep the hole with 150 bbls of high a vis sweep.
- Seepage loss or lost circulation may occur in this interval. Additions of drilling paper and calcium carbonate will aid in controlling seepage losses. Fibrous LCM should be used to control more sever losses.

Drilling Fluids Proposal Forest Öil Corporation

FOC State B - #10

7-7/8" -	(565' - 4,100'+/- MD) – 5 ½" Casing
Drilling Fluid System	Brine Water
Key Products	Lime, Salt Gel, MF-55, Caustic Soda, My Lo Gel, Fibrous LCM
Solids Control	Reserve pit, shaker
Potential Problems	Seepage losses, possible lost circulation, hole cleaning

	Inter	val Drilli	ng Fluid	Propertion	es	
Depth Interval (ft)	Mud Weight (ppg)	Funnel Viscosity Sec/qt	Plastic Viscosity (cp)	Yield Point (lb/100ft²)	API Fluid Loss (ml/30min)	Drill Solids (%)
3,000' - 4,100'	9.9 \(\) 10.0 \(\) 10.0 \(\) 10.2	26 – 34 32 - 34	1-2 $2-3$	$\begin{array}{c} 1-2 \\ 2-3 \end{array}$	NC 10 – 15	1 - 4 1 - 4

- Drill out of the 8-5/8" surface casing with brine water circulating the reserve pit if possible.
- Control PH at 9.5 10.0 with 1.0 1.5 lb/bbl lime.
- Sweep hole every $150^{\circ} 200^{\circ}$ with a 40 50 bbl high viscosity salt gel pill.
- At 3,000' return circulation to the steel pits and mud up with a salt gel for a 32 34sec/qt funnel viscosity and 10 – 15 cc fluid loss.

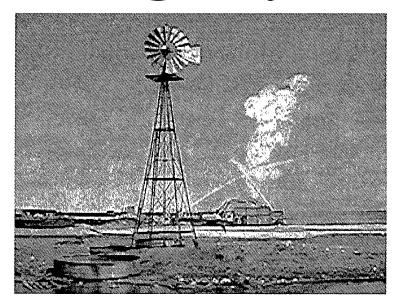
Forest Oil Corp.

Legals: State B #10

Surface Location:

Section 16, Township 17S, Range 31E 1,155' From South Line & 110' From East Line Eddy County, New Mexico

Hydrogen Sulfide "Contingency Plan"



		laway				

924 S. 1st 3229 Industrial Drive Artesia, NM Hobbs, NM 88240 (575) 746-2847 (877) 422-6345 (575) 392-2973

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H2S CONTINGENCY PLAN SECTION

Scope:

This contingency plan provides an organized plan of action for alerting and protecting the public within an area of exposure prior to an intentional release, or following the accidental release of a potentially hazardous volume of hydrogen sulfide. The plan establishes guidelines for all personnel whose work activity may involve exposure to Hydrogen Sulfide Gas (H₂S).

Objective:

Prevent any and all accidents, and prevent the uncontrolled release of H_2S into the atmosphere.

Provide proper evacuation procedures to cope with emergencies.

Provide immediate and adequate medical attention should an injury occur.

Discussion of Plan:

Suspected Problem Zones:

Implementation: This plan, with all details, is to be fully implemented 1000' before drilling into the first sour zone.

Emergency Response Procedure: This section outlines the conditions and denotes steps to be taken in the event of an emergency.

Emergency Equipment and Procedure: This section outlines the safety and emergency equipment that will be required for the drilling of this well.

Training Provisions: This section outlines the training provisions that must be adhered to 1000' before drilling into the first sour zone.

Emergency call lists: Included are the telephone numbers of all persons that would need to be contacted, should an H2S emergency occur.

Briefing: This section deals with the briefing of all persons involved with the drilling of this well.

Public Safety: Public Safety Personnel will be made aware of the drilling of this well.

Check Lists: Status check lists and procedural check lists have been included to ensure adherence to the plan.

General Information: A general information section has been included to supply support information.

EMERGECY PROCEDURES SECTION

- I. In the event of any evidence of H₂S level above 10 ppm, take the following steps immediately:
 - A. Secure breathing apparatus.
 - B. Order non-essential personnel out of the danger zone.
 - C. Take steps to determine if the H₂S level can be corrected or suppressed, and if so, proceed with normal operations.
- II. If uncontrollable conditions occur, proceed with the following:
 - A. Take steps to protect and/or remove any public downwind of the rig, including partial evacuation or isolation. Notify necessary public safety personnel and the N.M. Oil Conservation Division of the situation.
 - B. Remove all personnel to the Safe Briefing Area.
 - C. Notify public safety personnel for help with maintaining roadblocks and implementing evacuation.
 - D. Determine and proceed with the best possible plan to regain control of the well. Maintain tight security and safety measures.

III. Responsibility:

- A. The Company Approved Supervisor shall be responsible for the total implementation of the plan.
- B. The Company Approved Supervisor shall be in complete command during any emergency.
- C. The Company Approved Supervisor shall designate a back up Supervisor in the event that he/she is not available.

EMERGENCY PROCEDURE IMPLEMENTATION

I. Drilling or Tripping

A. All Personnel

- 1. When alarm sounds, don escape unit and report to upwind Safe Briefing Area.
- 2. Check status of other personnel (buddy system).
- 3. Secure breathing apparatus.
- 4. Wait for orders from supervisor.

B. Drilling Foreman

- 1. Report to the upwind Safe Briefing Area.
- 2. Don Breathing Apparatus and return to the point of release with the Tool Pusher or Driller (buddy system).
- 3. Determine the concentration of H₂S.
- 4. Assess the situation and take appropriate control measures.

C. Tool Pusher

- 1. Report to the upwind Safe Briefing Area.
- 2. Don breathing apparatus and return to the point of release with the Drilling Foreman or the Driller (buddy system).
- 3. Determine the concentration.
- 4. Assess the situation and take appropriate control measures.

D. Driller

- 1. Check the status of other personnel (in a rescue attempt, always use the buddy system).
- 2. Assign the least essential person to notify the Drilling Foreman and Tool Pusher, in the event of their absence.

3. Assume the responsibility of the Drilling Foreman and the Tool Pusher until they arrive, in the event of their absence.

E. Derrick Man and Floor Hands

1. Remain in the upwind Safe Briefing Area until otherwise instructed by a supervisor.

F. Mud Engineer

- 1. Report to the upwind Safe Briefing Area.
- 2. When instructed, begin check of mud for pH level and H₂S level.

G. Safety Personnel

- 1. Don Breathing Apparatus.
- 2. Check status of all personnel.
- 3. Wait for instructions from Drilling Foreman or Tool Pusher.

II. Taking a Kick

- A. All personnel report to the upwind Safe Briefing Area.
- B. Follow standard BOP procedures.

III. Open Hole Logging

- A. All unnecessary personnel should leave the rig floor.
- B. Drilling Foreman and Safety Personnel should monitor the conditions and make necessary safety equipment recommendations.

IV. Running Casing or Plugging

- A. Follow "Drilling or Tripping" procedures.
- B. Assure that all personnel have access to protective equipment.

SIMULATED BLOWOUT CONTROL DRILLS

All drills will be initiated by activating alarm devices (air horn). One long blast, on the air horn, for ACTUAL and SIMULATED Blowout Control Drills. This operation will be performed by the Drilling Foreman or Tool Pusher at least one time per week for each of the following conditions, with each crew:

Drill # 1 Bottom Drilling

Drill # 2 Tripping Drill Pipe

In each of these drills, the initial reaction time to shutting in the well shall be timed as well as the total time for the crew to complete its entire pit drill assignment. The times must be recorded on the IADC Driller's Log as "Blowout Control Drill".

Drill No.:

Reaction Time to Shut-In:

minutes,

seconds.

Total Time to Complete Assignment:

minutes,

seconds.

I. Drill Overviews

- A. Drill No. 1- Bottom Drilling
 - 1. Sound the alarm immediately.
 - 2. Stop the rotary and hoist kelly joint above the rotary table.
 - 3. Stop the circulatory pump.
 - 4. Close the drill pipe rams.
 - 5. Record casing and drill pipe shut-in pressures and pit volume increases.
- B. Drill No. 2 Tripping Drill Pipe
 - 1. Sound the alarm immediately.
 - 2. Position the upper tool joint just above the rotary table and set the slips.

- 3. Install a full opening valve or inside blowout preventor tool in order to close the drill pipe.
- 4. Close the drill pipe rams.
- 5. Record the shut-in annular pressure.

II. Crew Assignments

A. Drill No. 1 - Bottom Drilling

1. Driller

- a) Stop the rotary and hoist kelly joint above the rotary table.
- b) Stop the circulatory pump.
- c) Check flow.
- d) If flowing, sound the alarm immediately.
- e) Record the shut-in drill pipe pressure.
- f) Determine the mud weight increase needed or other courses of action.

2. Derrickman

- a) Open choke line valve at BOP.
- b) Signal Floor Man # 1 at accumulator that choke line is open.
- c) Close choke and upstream valve after pipe tams have been closed.
- d) Read the shut-in annular pressure and report readings to Driller.

3. Floor Man # 1

- a) Close the pipe rams after receiving the signal from the Derrickman.
- b) Report to Driller for further instructions.

4. Floor Man # 2

- a) Notify the Tool Pusher and Operator Representative of the H₂S alarms.
- b) Check for open fires and, if safe to do so, extinguish them.
- c) Stop all welding operations.
- d) Turn-off all non-explosion proof lights and instruments.
- e) Report to Driller for further instructions.

5. Tool Pusher

- a) Report to the rig floor.
- b) Have a meeting with all crews.
- c) Compile and summarize all information.
- d) Calculate the proper kill weight.
- e) Ensure that proper well procedures are put into action.

6. Operator Representative

- a) Notify the Drilling Superintendent.
- b) Determine if an emergency exists and if so, activate the contingency plan.

B. Drill No. 2 - Tripping Pipe

1. Driller

- a) Sound the alarm immediately when mud volume increase has been detected.
- b) Position the upper tool joint just above the rotary table and set slips.
- c) Install a full opening valve or inside blowout preventor tool to close the drill pipe.
- d) Check flow.
- e) Record all data reported by the crew.

f) Determine the course of action.

2. Derrickman

- a) Come down out of derrick.
- b) Notify Tool Pusher and Operator Representative.
- c) Check for open fires and, if safe to do so, extinguish them.
- d) Stop all welding operations.
- e) Report to Driller for further instructions.

3. Floor Man # 1

- a) Pick up full opening valve or inside blowout preventor tool and stab into tool joint above rotary table (with Floor Man # 2).
- b) Tighten valve with back-up tongs.
- c) Close pipe rams after signal from Floor Man # 2.
- d) Read accumulator pressure and check for possible high pressure fluid leaks in valves or piping.
- e) Report to Driller for further instructions.

4. Floor Man # 2

- a) Pick-up full opening valve or inside blowout preventor tool and stab into tool joint above rotary table (with Floor Man # 1).
- b) Position back-up tongs on drill pipe.
- c) Open choke line valve at BOP.
- d) Signal Floor Man # 1 at accumulator that choke line is open.
- e) Close choke and upstream valve after pipe rams have been closed.
- f) Check for leaks on BOP stack and choke manifold.
- g) Read annular pressure.

h) Report readings to the Driller.

5. Tool Pusher

- a) Report to the rig floor.
- b) Have a meeting with all of the crews.
- c) Compile and summarize all information.
- d) See that proper well kill procedures are put into action.

6. Operator Representative

- a) Notify Drilling Superintendent
- b) Determine if an emergency exists, and if so, activate the contingency plan.

IGNITION PROCEDURES

Responsibility:

The decision to ignite the well is the responsibility of the DRILLING FOREMAN in concurrence with the STATE POLICE. In the event the Drilling Foreman is incapacitated, it becomes the responsibility of the RIG TOOL PUSHER. This decision should be made only as a last resort and in a situation where it is clear that:

- 1. Human life and property are endangered.
- 2. There is no hope of controlling the blowout under the prevailing conditions.

If time permits, notify the main office, but do not delay if human life is in danger. Initiate the first phase of the evacuation plan.

Instructions for Igniting the Well:

- 1. Two people are required for the actual igniting operation. Both men must wear self-contained breathing apparatus and must use a full body harness and attach a retrievable safety line to the D-Ring in the back. One man must monitor the atmosphere for explosive gases with the LEL monitor, while the Drilling Foreman is responsible for igniting the well.
- 2. The primary method to ignite is a 25mm flare gun with a range of approximately 500 feet.
- 3. Ignite from upwind and do not approach any closer than is warranted.
- 4. Select the ignition site best suited for protection and which offers an easy escape route.
- 5. Before igniting, check for the presence of combustible gases.
- 6. After igniting, continue emergency actions and procedures as before.
- 7. All unassigned personnel will limit their actions to those directed by the Drilling Foreman.

NOTE: After the well is ignited, burning Hydrogen Sulfide will convert to Sulfur Dioxide, which is also highly toxic. Do not assume the area is safe after the well is ignited.

TRAINING PROGRAM

When working in an area where Hydrogen Sulfide (H_2S) might be encountered, definite training requirements must be carried out. The Company Supervisor will ensure that all personnel, at the well site, have had adequate training in the following:

- 1. Hazards and Characteristics of Hydrogen Sulfide.
- 2. Physicals effects of Hydrogen Sulfide on the human body.
- 3. Toxicity of Hydrogen Sulfide and Sulfur Dioxide.
- 4. H₂S detection, emergency alarm and sensor location.
- 5. Emergency rescue.
- 6. Resuscitators.
- 7. First aid and artificial resuscitation.
- 8. The effects of Hydrogen Sulfide on metals.
- 9. Location safety.

Service company personnel and visiting personnel must be notified if the zone contains H_2S , and each service company must provide adequate training and equipment for their employees before they arrive at the well site.

EMERGENCY EQUIPMENT REQUIREMENTS

Lease Entrance Sign:

Should be located at the lease entrance with the following information:

CAUTION-POTENTIAL POISON GAS HYDROGEN SULFIDE NO ADMITTANCE WITHOUT AUTHORIZATION

Respiratory Equipment:

- Fresh air breathing equipment should be placed at the safe briefing areas and should include the following:
- Two SCBA's at each briefing area.
- Enough air line units to operate safely, anytime the H₂S concentration reaches the IDLH level (100 PPM).
- Cascade system with enough breathing air hose and manifolds to reach the rig floor, the derrickman and the other operation areas.

Windsocks or Wind Streamers:

- A minimum of two 10" windsocks located at strategic locations so that they
 may be seen from any point on location.
- Wind streamers (if preferred) should be placed at various locations on the well site to ensure wind consciousness at all times. (Corners of location).

Hydrogen Sulfide Detector and Alarms:

- 1-Four channel H₂S monitor with alarms.
- Four (4) sensors located as follows: # 1 Rig Floor, # 2 Bell Nipple, # 3
 Shale Shaker, # 4 Mud Pits.
- Gastec or Draeger pump with tubes.
- Sensor test gas.

Well Condition Sign and Flags:

The Well Condition Sign w/flags should be placed a minimum of 150' before you enter the location. It should have three (3) color coded flags (green, yellow and red) that will be used to denote the following location conditions:

GREEN – Normal Operating Conditions YELLOW – Potential Danger RED – Danger, H2S Gas Present

Auxiliary Rescue Equipment:

- Stretcher
- 2 100' Rescue lines
- First Aid Kit properly stocked.

Mud Inspection Equipment:

Garret Gas Train or Hach Tester for inspection of Hydrogen Sulfide in the drilling mud system.

Fire Extinguishers:

Adequate fire extinguishers shall be located at strategic locations.

Blowout Preventor:

- The well shall have hydraulic BOP equipment for the anticipated BHP.
- The BOP should be tested upon installation.
- BOP, Choke Line and Kill Line will be tested as specified by Operator.

Confined Space Monitor:

There should be a portable multi-gas monitor with at least 3 sensors (O_2 , LEL & H2S). This instrument should be used to test the atmosphere of any confined space before entering. It should also be used for atmospheric testing for LEL gas before beginning any type of Hot Work. Proper calibration documentation will need to be provided.

Communication Equipment:

- Proper communication equipment such as cell phones or 2 way radios should be available at the rig.
- Radio communication shall be available for communication between the company man's trailer, rig floor and the tool pusher's trailer.
- Communication equipment shall be available on the vehicles.

Special Control Equipment:

- Hydraulic BOP equipment with remote control on the ground.
- Rotating head at the surface casing point.

Evacuation Plan:

- Evacuation routes should be established prior to spudding the well.
- Should be discussed with all rig personnel.

Designated Areas:

Parking and Visitor area:

- All vehicles are to be parked at a pre-determined safe distance from the wellhead.
- Designated smoking area.

Safe Briefing Areas:

- Two Safe Briefing Areas shall be designated on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds or they are at a 180 degree angle if wind directions tend to shift in the area.
- Personal protective equipment should be stored at both briefing areas or if a moveable cascade trailer is used, it should be kept upwind of existing winds. When wind is from the prevailing direction, both briefing areas should be accessible.

NOTE:

- Additional equipment will be available at the nearest Callaway Safety Office.
- Additional personal H₂S monitors are available for all employees on location.
- Automatic Flare Igniters are recommended for installation on the rig.

CHECK LISTS

Status Check List

Note	e: Date each item as they are implemented.	
1.	Sign at location entrance.	
2.	Two (2) wind socks (in required locations).	
3.	Wind Streamers (if required).	
4.	SCBA's on location for all rig personnel and mud loggers.	
5.	Air packs, inspected and ready for use.	
6.	Spare bottles for each air pack (if required).	
7.	Cascade system for refilling air bottles.	
8.	Cascade system and hose line hook up.	,
9.	Choke manifold hooked-up and tested. (Before drilling out surface casing.)	
10.	Remote Hydraulic BOP control (hooked-up and tested before drilling out surface casing).	
11.	BOP tested (before drilling out surface casing).	
12.	Mud engineer on location with equipment to test mud for H ₂ S.	
13.	Safe Briefing Areas set-up.	
14.	Well Condition sign and flags on location and ready.	
15.	Hydrogen Sulfide detection system hooked-up & tested.	
16.	Hydrogen Sulfide alarm system hooked-up & tested.	
17.	Stretcher on location at Safe Briefing Area.	
18.	2-100' Life Lines on location.	

19.	1-20# Fire Extinguisher in safety trailer.	
20.	Confined Space Monitor on location and tested.	
21.	All rig crews and supervisor trained (as required).	
22.	Access restricted for unauthorized personnel.	
23.	Drills on H ₂ S and well control procedures.	
24.	All outside service contractors advised of potential H_2S on the well.	
25.	NO SMOKING sign posted.	
26.	H ₂ S Detector Pump w/tubes on location.	
27.	25mm Flare Gun on location w/flares.	
28.	Automatic Flare Ignitor installed on rig.	

Procedural Check List

Perform the following on each tour:

- 1. Check fire extinguishers to see that they have the proper charge.
- 2. Check Breathing equipment to insure that they have not been tampered with.
- 3. Check pressure on the supply air bottles to make sure they are capable of recharging.
- 4. Make sure all of the Hydrogen Sulfide detection systems are operative.

Perform the following each week:

- Check each piece of breathing equipment to make sure that they are fully charged and operational. This requires that the air cylinder be opened and the mask assembly be put on and tested to make sure that the regulators and masks are properly working. Negative and Positive pressure should be conducted on all masks.
- 2. BOP skills.
- 3. Check supply pressure on BOP accumulator stand-by source.
- 4. Check all breathing air mask assemblies to see that straps are loosened and turned back, ready to use.
- 5. Check pressure on cascade air cylinders to make sure they are fully charged and ready to use for refill purposes if necessary.
- 6. Check all cascade system regulators to make sure they work properly.
- 7. Perform breathing drills with on-site personnel.
- 8. Check the following supplies for availability:
 - Stretcher
 - Safety Belts and ropes.
 - Spare air bottles.
 - Spare oxygen bottles (if resuscitator required).
 - Gas Detector Pump and tubes.
 - Emergency telephone lists.
- 9. Test the Confined Space Monitor to verify the batteries are good.

BRIEFING PROCEDURES

The following scheduled briefings will be held to ensure the effective drilling and operation of this project:

Pre-Spud Meeting

Date: Prior to spudding the well. Attendance: Drilling Supervisor

Drilling Engineer Drilling Foreman Rig Tool Pushers Rig Drillers

Mud Engineer

All Safety Personnel

Key Service Company Personnel

Purpose: Review and discuss the well program, step-by-step, to insure

complete understanding of assignments and responsibilities.

EVACUATION PLAN

General Plan

The direct lines of action prepared by CALLAWAY SAFETY EQUIPMENT CO., INC., to protect the public from hazardous gas situations are as follows:

- 1. When the company approved supervisor (Drilling Foremen, Tool Pusher or Driller) determine that Hydrogen Sulfide gas cannot be limited to the well location, and the public will be involved, he will activate the evacuation plan. Escape routes are noted on the Area Map.
- 2. Company safety personnel or designee will notify the appropriate local government agency that a hazardous condition exists and evacuation need to be implemented.
- 3. Company approved safety personnel that have been trained in the use of the proper emergency equipment will be utilized.
- 4. Law enforcement personnel (State Police, Local Police Department, Fire Department, and the Sheriff's Department) will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.

NOTE: Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

5. After the discharge of gas has been controlled, "Company" safety personnel will determine when the area is safe for re-entry.

See Emergency Action Plan

Emergency Assistance Telephone List

PUBLIC SAFETY:	911 or
Eddy Co. Sheriff's	(505) 887-7551
Maljamar Police Department	(505) 396-3611
Maljamar Fire Department	(505) 676-4100
Lea Regional Medical Center	(877) 492-8001
Life Flight:	
Southwest Air-Med E Vac.	(800) 242-6199
Approx Lat: N.32.500090	` ,
Approx Lon: W.103.515600	
New Mexico State Police	(505) 392-5588
New Mexico D.O.T.	(505) 827-5100
Bureau of Land Management	(505) 393-3612
U. S. Dept. of Labor	(505) 248-5302
New Mexico Poison Center	(800) 222-1222
New Mexico OCD	(505) 393-6161
New Mexico/After Hours Pager	(505) 370-7106

FOF	REST	OIL	COR	ìΡ.

Forest Oil Corp.		Office (303)812-1400		
Contact persons:				
Todd S. McDonald Tim Savoy John Madruga Emily Jackson-Reardon	Drilling Engineer Operations Support Drilling Foreman Drilling Technician	303-812-1744 (o) 303-812-1413 (o) 505-391-0132 (o) 303-812-1700 (o)	303-842-0883 (c) 307-262-2662 (c)	
<u>Drilling Company:</u> Tool Pusher: Jason Rh Rig#2			432-664-2518 432-664-4010	

Callaway Safety Equipment		
Artesia	Office	(505) 746-2847
Hobbs	Office	(877) 422-6345

Affected Notification List

(within a	radius	of exposure	@100ppm)
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The geologic zones that will be encountered during drilling are known to contain hazardous quantities of H_2S . The accompanying map illustrates the affected areas of the community. The residents within this radius will be notified via a hand delivered written notice describing the activities, potential hazards, conditions of evacuation, evacuation drill siren alarms and other precautionary measures.

Evacuee Description:

Residents:

Notification Process:

A continuos siren audible to all residence will be activated, signaling evacuation of previously notified and informed residents.

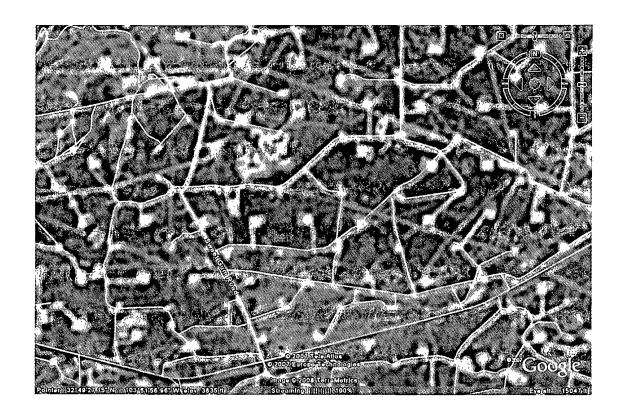
Evacuation Plan:

All evacuees will migrate lateral to the wind direction.

The Oil Company will identify all home bound or highly susceptible individuals and make special evacuation preparations, interfacing with the local and emergency medical service as necessary.

MAPS AND PLATS (Maps & Plats Attached)

Red Dot = Approximate Drilling Site



GENERAL INFORMATION

Toxic Effects of H₂S Poisoning

Hydrogen Sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 10 PPM, which is .001% by volume. Hydrogen Sulfide is heavier than air (specific gravity-1.192) and is colorless and transparent. Hydrogen Sulfide is almost as toxic as Hydrogen Cyanide and is 5-6 times more toxic than Carbon Monoxide. Occupational exposure limits for Hydrogen sulfide and other gasses are compared below in Table I. Toxicity table for H₂S and physical effects are shown in Table II.

Table 1Permissible Exposure Limits of Various Gasses

Common Name	Symbol	Sp. Gravity	TLV	STEL	IDLH
Hydrogen Cyanide	HCN	.94	4.7 ppm	С	
Hydrogen Sulfide	H ₂ S	1.192	10 ppm	1 5 ppm	100 ppm
Sulfide Dioxide	SO ₂	2.21	2 ppm	5 ppm	
Chlorine	CL	2.45	.5 ppm	1 ppm	
Carbon Monoxide	СО	0.97	25 ppm	200 ppm	
Carbon Dioxide	CO ₂	1.52	5000 ppm	30,000 ppm	
Methane	CH₄	0.55	4.7% LEL	14% UEL	

Definitions

- A. TLV Threshold Limit Value is the concentration employees may be exposed to based on a TWA (time weighted average) for eight (8) hours in one day for 40 hours in one (1) week. This is set by ACGIH (American Conference of Governmental Hygienists and regulated by OSHA.
- B. STEL Short Term Exposure Limit is the 15 minute average concentration an employee may be exposed to providing that the highest exposure never exceeds the OEL (Occupational Exposure Limit). The OEL for H_2S is 19 PPM.
- C. IDLH Immediately Dangerous to Life and Health is the concentration that has been determined by the ACGIH to cause serious health problems or death if exposed to this level. The IDLH for H₂S is 100 PPM.

D. TWA – Time Weighted Average is the average concentration of any chemical or gas for an eight (8) hour period. This is the concentration that any employee may be exposed to based on an TWA.

TABLE II
Toxicity Table of H₂S

Percent %	PPM	Physical Effects
,0001	1	Can smell less than 1 ppm.
.001	10	TLV for 8 hours of exposure
.0015	15	STEL for 15 minutes of exposure
.01	100	Immediately Dangerous to Life & Health. Kills sense of smell in 3 to 5 minutes.
.02	200	Kills sense of smell quickly, may burn eyes and throat.
.05	500	Dizziness, cessation of breathing begins in a few minutes.
.07	700	Unconscious quickly, death will result if not rescued promptly.
.10	1000	Death will result unless rescued promptly. Artificial resuscitation may be necessary.

PHYSICAL PROPERTIES OF H₂S

The properties of all gasses are usually described in the context of seven major categories:

COLOR
ODOR
VAPOR DENSITY
EXPLOSIVE LIMITS
FLAMMABILITY
SOLUBILITY (IN WATER)
BOILING POINT

Hydrogen Sulfide is no exception. Information from these categories should be considered in order to provide a fairly complete picture of the properties of the gas.

COLOR – TRANSPARENT

Hydrogen Sulfide is colorless so it is invisible. This fact simply means that you can't rely on your eyes to detect its presence. a fact that makes the gas extremely dangerous to be around.

ODOR -- ROTTEN EGGS

Hydrogen Sulfide has a distinctive offensive smell, similar to "rotten eggs". For this reason it earned its common name "sour gas". However, H₂S, even in low concentrations, is so toxic that it attacks and quickly impairs a victim's sense of smell, so it could be fatal to rely on your nose as a detection device.

VAPOR DENSITY - SPECIFIC GRAVITY OF 1.192

Hydrogen Sulfide is heavier than air so it tends to settle in low-lying areas like pits, cellars or tanks. If you find yourself in a location where H_2S is known to exist, protect yourself. Whenever possible, work in an area upwind and keep to higher ground.

EXPLOSIVE LIMITS - 4.3% TO 46%

Mixed with the right proportion of air or oxygen, H₂S will ignite and burn or explode, producing another alarming element of danger besides poisoning.

FLAMMABILITY

Hydrogen Sulfide will burn readily with a distinctive clear blue flame, producing Sulfur Dioxide (SO₂), another hazardous gas that irritates the eyes and lungs.

SOLUBILITY – 4 TO 1 RATIO WITH WATER

Hydrogen Sulfide can be dissolved in liquids, which means that it can be present in any container or vessel used to carry or hold well fluids including oil, water, emulsion and sludge. The solubility of H_2S is dependent on temperature and pressure, but if conditions are right, simply agitating a fluid containing H_2S may release the gas into the air.

BOILING POINT – (-76 degrees Fahrenheit)

Liquefied Hydrogen Sulfide boils at a very low temperature, so it is usually found as a gas.

RESPIRATOR USE

The Occupational Safety and Health Administration (OSHA) regulates the use of respiratory protection to protect the health of employees. OSHA's requirements are written in the Code of Federal Regulations, Title 29, Part 1910, Section 134, Respiratory Protection. This regulation requires that all employees who might be required to wear respirators, shall complete a OSHA mandated medical evaluation questionnaire. The employee then should be fit tested prior to wearing any respirator while being exposed to hazardous gasses.

Written procedures shall be prepared covering safe use of respirators in dangerous atmospheric situations, which might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available respirators.

Respirators shall be inspected prior to and after each use to make sure that the respirator has been properly cleaned, disinfected and that the respirator works properly. The unit should be fully charged prior to being used.

Anyone who may use respirators shall be properly trained in how to properly seal the face piece. They shall wear respirators in normal air and then in a test atmosphere. (Note: Such items as facial hair (beard or sideburns) and eyeglass temple pieces will not allow a proper seal.) Anyone that may be expected to wear respirators should have these items removed before entering a toxic atmosphere. A special mask must be obtained for anyone who must wear eyeglasses. Contact lenses should not be allowed.

Respirators shall be worn during the following conditions:

- A. Any employee who works near the top or on the top of any tank unless tests reveal less than 20 ppm of H2S.
- B. When breaking out any line where H2S can reasonably be expected.
- C. When sampling air in areas where H2S may be present.
- D. When working in areas where the concentration of H2S exceeds the Threshold Limit Value for H2S (10 ppm).
- E. At any time where there is a doubt as to the H2S level in the area to be entered.

EMERGENCY RESCUE PROCEDURES

DO NOT PANIC!!!

Remain Calm - THINK

- 1. Before attempting any rescue you must first get out of the hazardous area yourself. Go to a safe briefing area.
- 2. Sound an alarm and activate the 911 system.
- 3. Put on breathing apparatus. At least two persons should do this, when available use the buddy system.
- 4. Rescue the victim and return them to a safe briefing area.
- 5. Perform an initial assessment and begin proper First Aid/CPR procedures.
- 6. Keep the victim lying down with a blanket or coat, etc..., under the shoulders to keep airway open. Conserve body heat and do not leave unattended.
- 7. If the eyes are affected by H2S, wash them thoroughly with potable water. For slight irritation, cold compresses are helpful.
- 8. In case a person has only minor exposure and does not lose consciousness totally, it's best if he doesn't return to work until the following day.
- 9. Any personnel overcome by H2S should always be examined by medical personnel. They should always be transported to a hospital or doctor.