

<u>District II</u> 1301 W Grand Ave , Artesia, NM 88210 Phone (505) 748-1283 Fax (505) 748-9720

State of New Mexico FOF DED

Form C-101 Permit 62843

Oil Conservation Division 15 PM 12 FEB 2 2 2008
1220 S. St Francis Dr.
Santa Fe NM 87505
OCD-ARTESIA

APPL	ICATIO	N FOR PE	ERMIT	TO DRILL, I	RE-ENTE	R. DEEPE	N. PLUGBA	CK. OR A	DD A ZONE
				ne and Address			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2 OGRID N	
		FORES		ORPORATION				8041	
		D	707 17				200 -	3 API Nun	nber
		D	ENVEK,	CO 80202			30-0	0/5-36256	
	Property Cod			5	Property Na	me			Well No
37	7098	2		F	OCSTATE	E B			012
				7. St	ırface Lo	cation			
UL - Lot	Section	Township	Rang	· • • • • • • • • • • • • • • • • • • •	Feet From	N/S Line	Feet From	E/W Line	County
P	16	17S	31E	E P	10	S	110	Е	EDDY
				8. Po	ol Inforn	nation			
RAYBUR	RG JACKSO	ON;SR-Q-G	-SA						2850
				Addition	al Well In	formation			
9 Work	٠. ا	10 Well	• •	11 Ca	ble/Rotary		12 Lease Type	13 Grour	nd Level Elevation
New W	/ell	OIL					State		3838
14 Mı	14 Multiple 15 Proposed De		•	16 Formation		17 Contractor	1	8 Spud Date	
1	N 4/60 Grayburg								
Depth	to Ground w	ater		Distance fro	om nearest fre	sh water well		Distance to n	earest surface water
Liner S	ynthetic Loop System		mils thick	Clay Pit Vol	ume	bbls Drilling	Method Vater Brine	Diesel/Oil-based	「 Gas/Air
			10	Proposed Ca	sing and				
Гуре Н	lole Size	Casing T		Casing Weight		tting Depth	Sacks of C	Cement	Estimated TOC
Surf	12.25	8.625		24		5-450'	310		0
Prod	7.875	, 5.5		17		4100	640		0
perol		SET SUN	Casin	Clasing, g/Cement Pro	ogram: A	dditional Co	omments	1-07-KI	estle,
,									
		· · · · · · · · · · · · · · · · · · ·	P	roposed Blow	out Prev	ention Prog	ram		
	Туре			rking Pressure			ressure		nufacturer
Dou	ıbleRam			3000		50	00	<u> </u>	Shaffer
t of my kno irther cert	owledge and b ify that the d delines a g	elief rilling pit will	be constru	ue and complete to t acted according to (attached) alternat	tive #	roved By:	NSERVA JU	HON BIN	rsión.
rinted Nar		k	}		Title				
itle: 50		Halus	000	TECH		roved Date:	1-1-08	Expiration Da	ate: 4-7-20
mail Addr		oush	@7	brestoil	·COM		<u> </u>	1	
inan , taa.									

Apr 07 2008 9:54

JAMESBRUCE

5059822151

p.2



Bill Richardson Governor

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



April 1, 2008

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

Administrative Order NSL-5804

Re: Forest Oil Corporation

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.

a commendate the property of

JAMESBRUCE

5059822151

April 1, 2008 Page 2

Apr 07 2008 9:54

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.F(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 B. Fesmire, P.E.

Director

MEF/db

New Mexico Oil Conservation Division - Artesia cc: New Mexico State Land Office - Santa Fe

United States Bureau of Land Management - Carlsbad

P. 004

Apr 07 2008 9:54 JAMESBRUCE

5059822151

p. 1

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

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 us and return the document to us. Thank you.

State of New Mexico

*DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT ☐ AMENDED REPORT 1220 S. ST. FRANCIS DR., SANTA FR, NM 67505 Pool Code Pool Name API Number Property Name Well Number Property Code FOCASTATE & 12 Operator Name Elevation OGRID No. FOREST OIL CORPORATION 3838'

Surface Location

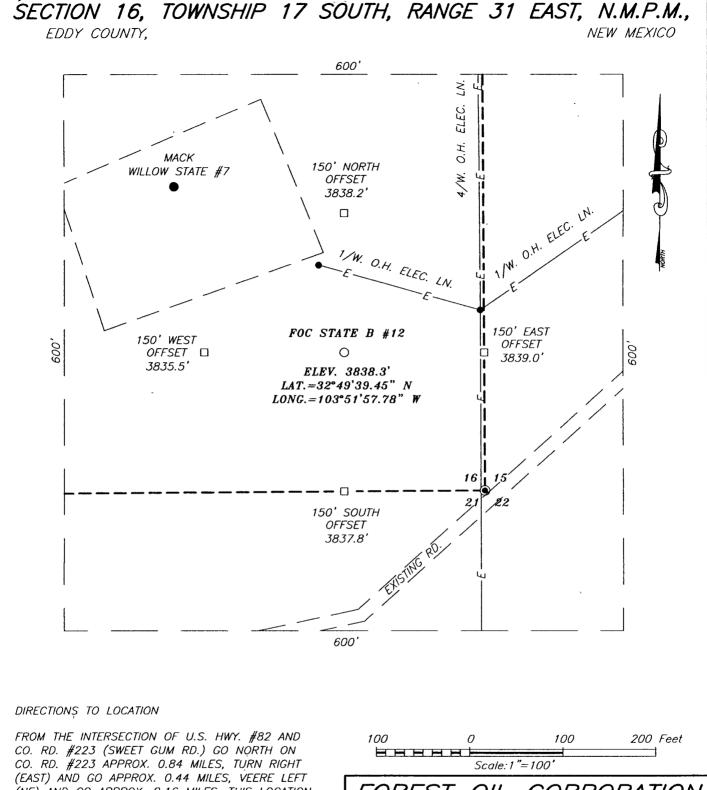
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Р	16	17-S	31-E		150	SOUTH	150	EAST	EDDY

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
Dedicated Acres	Joint o	r Infill Co	nsolidation (Code Ore	der No.				

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

		G BEEN ATTROVED DI TI	
GEODETIC COORDINATES NAD 27 NME Y=665118.1 N X=643539.8 E LAT.=32*49*39.45" N LONG.=103*51*57.78" W	SECTION 16 SECTION 15		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.
SECTION 16 SECTION 21	150'	SECTION 15 ³ SECTION 22	Signature Date 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.
	SECTION 21 SECTION 22		JUNE 07, 2006 Date Surveyed MR Signature & Seal of Only Professional Surveyors ME O6.11.0931 Certificate No. GARY EIDSON RONALD J. EIDSON 12641 3239



(NE) AND GO APPROX. 0.16 MILES. THIS LOCATION IS APPROX. 200' NORTH OF ROAD.



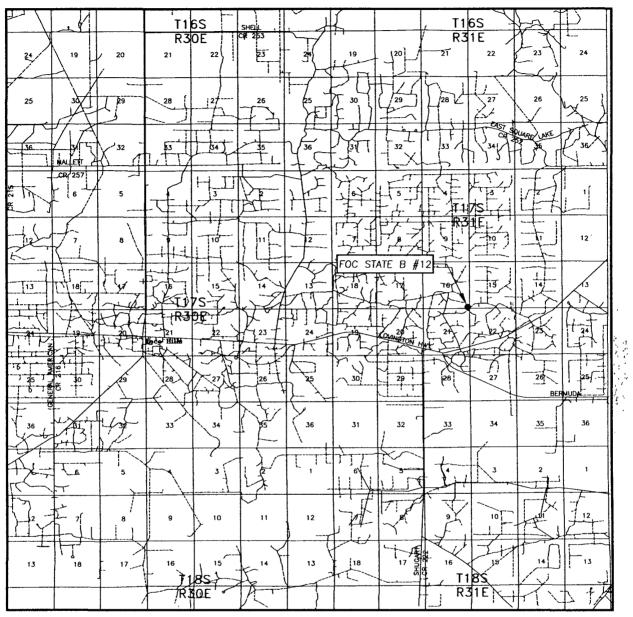
PROVIDING SURVEYING SERVICES SINCE 1946 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS, N.M. 88240 (505) 393-3117

FOREST OIL CORPORATION

FOC STATE B #12 WELL LOCATED 150 FEET FROM THE SOUTH LINE AND 150 FEET FROM THE EAST LINE OF SECTION 16, TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: Ot	6/07/06		Sheet	1 0	of	1	Sheets	
W.O. Number: 06.	11.0931	Dr	By: M.R.		Re	v 1:1	V/A	
Date: 06/19/06	Disk: CD#	46	0611	0931	П	Scale.	:1"=100	,

VICINITY MAP



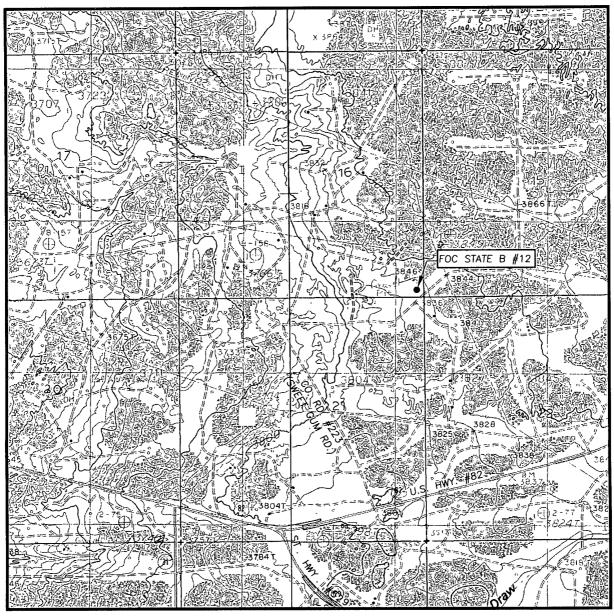
SCALE: 1" = 2 MILES

SEC. 16	TWP. <u>17-S</u> RGE. <u>31-E</u>	
SURVEY	N.M.P.M.	
COUNTYE	EDDY EDDY NEW MEXIC	0_
DESCRIPTIO	N 150' FSL & 150' FI	EL
ELEVATION_	3838'	
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

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 150' FSL & 150' FEL

ELEVATION 3838'
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'



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





Proposal No: 180656283B

Forest Oil Corp. STATE B #12

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

Fax:

Bus Phone:

(505) 746-3140 (505) 746-2293 Service Representatives:

Gordon Reid Senior Account Manager Denver, Colorado

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

Date:

January 25, 2008



Proposal No: 180656283B

JOB AT A GLANCE

Depth (TVD) 565 ft

Depth (MD) 565 ft

Hole Size 12.25 in

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

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

Total Mix Water Required 2,400 gals

Lead Slurry

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

 Density
 12.5 ppg

 Yield
 1.98 cf/sack

Tail Slurry

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

Displacement

Water 33 bbls

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

Date:

January 25, 2008



Proposal No: 180656283B

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D.: 🥳 💢	DE	PTH(ft)
Comment of the commen	MEASURED	TRUE VERTICAL
12.250 HOLE	565	565

SUSPENDED PIPES

DIAMETE	ER (in)	WEIGHT	★ */2 5	ΓH(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

Mud Type

Water Based

Est. Static Temp.

84 ° F

Est. Circ. Temp.

80 ° F

VOLUME CALCULATIONS

257 ft	Х	0.4127 cf/ft	with	100 % excess	=	211 7 cf
308 ft	х	0.4127 cf/ft	with	100 % excess	=	254.6 cf

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

TOTAL SLURRY VOLUME = 480.7 cf

86 bbls

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

Date:

January 25, 2008



Proposal No: 180656283B

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR AMOUNT AND TYPE OF CEMENT	
Lead Slurry	212	 I 1.98 = 110 sacks (35:65) Poz (Fly Ash) Class C Ceme 2% bwoc Calcium Chloride + 0.25 lbs/sack Cell Flake + 5 lbs/sack LCM-1 + 6% bwoc Bentonite 98.4% Fresh Water 	lo
Tail Slurry	269	 I 1.34 = 200 sacks Class C Cement + 2% bwoc Calcium Chloride + 56.4% Fresh Water 	า
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 (gr	os)	10.27 6.36	

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

Date:

January 25, 2008



Proposal No: 180656283B

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	62.0	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 \$3,699.87							

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 S	lubtotal:	\$1,318.54		\$501.05

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	\$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: 180656283B

PRICE ESTIMATE

Freight/Delivery Charges

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT
527	tonmi	Bulk Delivery, Dry Products	2.47	1,301.69	62.0	494.64
	Freight/Delivery Charges S		Subtotal:	\$1,301.69		\$494.64

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'.

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

Date:

January 25, 2008



Proposal No: 180656283B

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 bbis

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

Date:

January 25, 2008



Proposal No: 180656283B

WELL DATA

ANNULAR GEOMETRY

, ,	ANNULAR I.D.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		/ DE	PTH(ft)	18 4 1 m 1
633	(in)		· . /	MEASURED		TRUE:VE	RTICAL
	8.097 CASING			565		56	35
	7.875 HOLE			4,100		4,1	00

SUSPENDED PIPES

_	COMPANIE DIAMETER	R (in)	WEIGHT	WEIGHT DEPTH(ft)		
`	O.D. (1)	<. ∦. 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	X	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	Х	0.1733 cf/ft	with	35 % excess	=	608.1 cf
40 ft	Х	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: 180656283B

FLUID SPECIFICATIONS

FLUID	VOLUME CU-FT	VOLUME FACTOR AMO	DUNT AND	TYPE OF CEMENT
Lead Slurry	328	5%	bwow Sodiu	5) Poz (Fly Ash):Class C Cement + m Chloride + 0.25 lbs/sack Cello c Bentonite + 107.8% Fresh Water
Tail Slurry	613	5% b Flake	wow Sodium	Poz (Fly Ash):Class C Cement + Chloride + 0.25 lbs/sack Cello FL-25 + 2% bwoc Bentonite + er
Displacement		94.4 bbls V	Vater	
CEMENT PROPERTIE	S			
			SLURRY NO. 1	SLURRY NO. 2
Clumy Moight (nng)				
Slurry Weight (ppg)			12.50	14.20
Slurry Yield (cf/sack)	nn)		2.04 11.24	1.30 5.86
Amount of Mix Water (g	08)		11.24	0.00

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

Date:

January 25, 2008



Proposal No: 180656283B

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 S	\$22,519.37		\$8,557.37	

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 Subtotal:			\$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:					\$2,991.36

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

Date:

January 25, 2008



Proposal No: 180656283B

PRICE ESTIMATE

Freight/Delivery Charges

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT
1023	tonmi	Bulk Delivery, Dry Products	2.47	2,526.81	62.0	960.19
	Freight/Delivery Charges S			\$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 01 59 Gr4175

Operator: Forest Oil Corp.
Well Name: STATE B #12
Date: January 25, 2008

Proposal No: 180656283B

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

Well Name: Date:

Operator Name: Forest Oil Corp. STATE B #12 January 25, 2008



Proposal No: 180656283B

End of Report

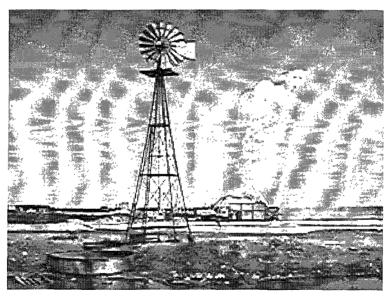
Forest Oil Corp.

Legals: FOC State B #12

Surface Location:

Section 16, Township 17S, Range 31E 10' From South Line & 110' From East Line Eddy County, New Mexico

Hydrogen Sulfide "Contingency Plan"



Callaway Safety Equipment Co., Inc.

7 924 S. 15 Artesia, NM 7 (575) 746-2847

(877) 422-6345

3229 Industria Drive Hobbs, NM 88240 (575) 392-2973

TABLE OF CONTENTS

I. H2S Contingency Plan

- A. Scope
- B. Objective
- C. Discussion of Plan

II. Emergency Procedures

- A. Emergency Procedures
- B. Emergency Reaction Steps
- C. Simulated Blowout Control Drills

III. Ignition Procedures

- A. Responsibility
- B. Instructions

IV. Training Requirements

V. Emergency Equipment

VI. Check Lists

- A. Status Check List
- B. Procedural Check List

VII. Briefing Procedures

VIII. Evacuation Plan

- A. General Plan
- B. Emergency Phone Lists

IX. Maps and Plats

- A. Location Plat
- B. Map to Location
- C. Radius of Exposure

X. General Information

- A. H2S Permissible Limits

- B. Toxicity TableC. Physical PropertiesD. Respirator UseE. Emergency Rescue

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 H₂S 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. Railroad Commission 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 (H₂S) 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 H₂S, 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.
- ullet Additional personal H_2S 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.	H₂S Detector Pump w/tubes on location.	
27.	25mm Flare Gun on location w/flares.	
	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.32.493871	
Approx Lon: W.103.515884	-
New Mexico State Police (505) 392-5588
New Mexico D.O.T. (505	827-5100
Bureau of Land Management (505) 393-3612
) 248-5302
) 222-1222
New Mexico OCD (505) 393-6161
New Mexico/After Hours Pager (505)) 370-7106

FOREST OIL CORP.

Forest Oil Corp.		0	office (303)812-1400
Contact persons:			
Todd S. McDonald	Drilling Engineer	303-812-1744 (o)	303-842-0883 (c)
Tim Savoy	Operations Support	303-812-1413 (o)	, ,
John Madruga	Drilling Foreman	505-391-0132 (o)	307-262-2662 (c)
Emily Jackson-Reardon	Drilling Technician	303-812-1700 (o)	`,
Drilling Company:	Lantern Drilling		
Tool Pusher: Jason Rh		#-	432-664-2518
Rig#2		#-	432-664-4010

Callaway Safety Equipment

Artesia			Office	(505) 74	16-2847
Hobbs			Office	(877) 42	2-6345

Affected Notification List

(within a	' radius	of exposure	@100ppm))

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.

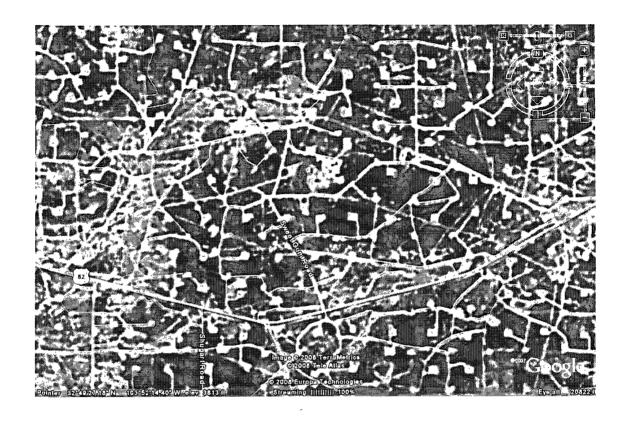
Evacuation Plan:

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 II. 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	15 ppm	100 ppm
Sulfide Dioxide	SO ₂	2.21	2 ppm	5 ppm	
Chlorine	CL	2.45	.5 ppm	1 ppm	
Carbon Monoxide	CO	0.97	25 ppm	200 ppm	
Carbon Dioxide	CO ₂	1.52	5000 ppm	30,000 ppm	
Methane	ČH₄	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 H₂S 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.

Drilling Fluids Proposal Forest Oil Corporation FOC State B - #12

Casing Size	Hole Size	Casin Progra	m			Mud Systen	n 💢	Mud Weight	Sum Days	
(in)	(in)		(ft) MD	(f	t)			(ppg)		
			525.	Surfac	e Hole	M-I Gel Spu	ıd Mud	8.4 - 8.8	2	
8-5/8"	12-1/4"		525,	Rustler A	Anhydrite				, and the second	
S. SANS		3 (M)					(A)	Alle autob	4	\$0.50 \\$80.00 \$0.50 \\$80.00
			533'	Sal	ado		* ,			
							Ships			
			1732	Ya	tec	Brine W	ater	9.9 - 10.0	, , ,	
			1732							
			2639	Que	eens					
			2016	Dom					ese in	
			2816	λ/ I - % δώ	rose					
24.3			3007	Gray	burg S	Salt Gel / My	LO Gel	10.0 – 10.2		
									1 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
			3287	Premie	r Sand		(k.) Mark			
			3360	San A	ndres					
			3529	Jack	Son (3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
			3890	Base of	Jackson			,		
5-1/2"	7-7/8"	instant S	4030	Total	Depth				12	

Drilling Fluids Proposal

Forest Oil Corporation FOC State B - #12

12-1/4	" - (0 – 525' 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 Dril	ing Fluid Pr	roperties.	
Depth Interval V	Mud Funnel Veight Viscosity		Yield API Point Fluid Lo	Solids
(ft)	(ppg) Sec/qt	(cp) (l	lb/100ft²) (ml/30mi	n) (%)
0 - 525%	4 - 8.8	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 Oil Corporation FOC State B - #12

	(525' -4,030'+/- 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			Properties	S	
Depth Interval (ft)	Mud Weight (ppg)	Funnel Viscosity Sec/qt	SZ . 18 SHING MAY 1988 .	Yield Point (lb/100ft²)	API Fluid Loss (ml/30min)	Drill Sölids (%)
525' - 3,000' 3,000' - 4,030'	9.9 - 10.0 10.0 - 10.2	32 - 34	$ \begin{array}{c} 1-2 \\ 2-3 \end{array} $	1-2 2-3	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' 200' 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 34 sec/qt funnel viscosity and 10 15 cc fluid loss.