<u>District I</u> 1625 N Fren <u>District II</u> 1301 W. Gra	nch Dr , Ho	bbs, NM 8		IVE	State hergy Mine	e of Ne rals and	w Mexico I Natural Reso	ources		Form C-101 June 16, 2008
<u>District III</u> 1000 Rio Bra <u>District IV</u>	azos Road,	Aztec, NN			1220 S	outh St	tion Division . Francis Dr.		,	ropriate District Office
1220 S St F	rancis Dr., PLICA	Santa Fe, 1	NM 87505		San	ta Fe, N DE EN	IM 87505	EN DI LICI		AMENDED REFORT
			Operator Nan Marshall &	ic and Addr	ess	LE-LIN	IER, DEEP	EN, PLUG	OGRID Nun 014187	ADD A ZONE
			P O Bo Midland, TX	x 50880	-			20 0	API Numb	anar
° Prope	erty Code 774	5			[°] Propert Medlin	y Napro Fee 9		<u>30</u> - 0	Well No 1-H	1018
wild	deat	Medlin R	⁹ Proposed Pool 1 anch West Abo-	Wolfcamp		9		¹⁰ Pro	posed Pool 2	
<u> </u>				woneanp		ace Lo	cation	<u>_</u>	<u> </u>	
UL or lot no K	Section 9	Township 15-S	Range 31-E	Lot	Idn Feet	from the 440	North/South line	Feet from the	East/West line	County
<u>,</u>	L			onosed B	,,,		SOUTH	2490	WEST	Chaves
UL or lot no	Section	Township	Range	Lot		from the	North/South line	Feet from the	East/West line	County
_×₩	9	15-S	31-E			30	SOUTH	330	WEST	Chaves
¹¹ Work 1	Type Code		¹² Well Type Co		Additional	Well II			/	
New	Well		Oil			otary		Lease Type Code Fee	G	round Level Elevation 4,429 ft.
Abo-Wolfca	ultiple mp transit	tion	¹⁷ Proposed De 8,980 ft.	pth		ormation Volfcamp	P	¹⁹ Contractor atriot Drilling	А	²⁰ Spud Date SAP (07/2009)
				²¹ Prop	osed Casir	ig and	Cement Prog	ram		0/11 (0//2009)
Hole Si	ze	Ca	ising Size		g weight/foot		etting Depth	Sacks of C	ement	Estimated TOC
17.5		1	3.375		48			380		
12.25			9.625		32.3		3950 1065			
<u> </u>			7.00		32	<u> </u>	9130			3450 V 8980 B
			4.500		11.6		.603 MD			8980 6
Marshall & Wi	inston Inco	rporated pl	ans to drill a horiz	zontal well a	as follows. First	drill the v	ertical wellbore to 9	9,230 ft , plug bac	k and kick off at	0 0 3450 8980 d new productive zone an estimated 8,390 ft. this point with the le lower Abo and upper
A 5,000 psi BC bradenhead or ram system	nations kno DP equipmo casing hea circulation	own as the ent stack sl d shall hav system wil	Medlin Ranch Wo nall be installed or c a working pressi l be utilized, the C	est Abo-Wo i the surface ure of 5,000 C-144 is atta	Ifcamp pool e casing and ope) psi minimum 7 iched	rated acco The BOP	ording the NMOCD shall include an at) rules All equipn utomatic accumul	ient and connect ator, Kelly cock,	ions above the an Annular and double way
²³ ,I hereby certibest of my know	ify that the wledge and	informatio belief	n given above is t	rue and con	nplete to the	OIL CONSERVATION DIVISION				
Signature.	Signature.					Approved by.				
Printed name:	Printed name: Vernon D. Dyer					Title. PETROLEUM ENGINEER				
Tıtle	AGENT	. Dyci				Approva			piration Date	
E-mail Address	vdyeroil@		net				JULI4	2009		
Date.	- 20		Phone	20-0355		Conditio	ns of Approval Atta	ched	1	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			(575)4				·····			






VICINITY MAP



SEC. 9 TWP. 15-S RGE. 31-E SURVEY N.M.P.M. COUNTY CHAVES STATE NEW MEXICO DESCRIPTION 2440' FSL & 2490' FWL ELEVATION 4429' MARSHALL & OPERATOR WINSTON, INC. LEASE MEDLIN FEE 9

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## LOCATION VERIFICATION MAP



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#### Marshall & Winston, Inc. Medlin Fee 9-1H

## RECEIVED

JUL 0 2 2009 MOBBSOCD

Chaves County, New Mexico June 25, 2009

Well Proposal

Prepared for: Mr. Gabe Herrera

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Prepared by: Michael Beggs Region Engineer Midland, Texas



#### Service Point:

Artesia Bus Phone: (505) 746-3140 Fax: (505) 746-2293

#### Service Representatives: Bubba Sullivan Manager, City Sales Odessa, Texas

Gr4105

### WELL DATA

#### ANNULAR GEOMETRY

ANNULAR I.D.	DE	PTH(ft)
(in)	MEASURED	TRUE VERTICAL
17 500 HOLE	340	340

## SUSPENDED PIPES

DIAMET	ER (in)	WEIGHT	DEP	TH(ft)
<u>O.D.</u>	I.D.	(lbs/ft)	MEASURED	TRUE VERTICAL
13 375	12.715	48	340	340

Float Collar set @	300 ft
Mud Density	8.50 ppg
Est. Static Temp.	82 ° F
Est. Circ. Temp.	80 ° F

#### **VOLUME CALCULATIONS**

340 ft 40 ft	x x	0.6946 cf/ft 0.8818 cf/ft	with with	0.04	=	472.4 cf 35.3 cf (inside pipe)
ì			TOTAL	SLURRY VOLUME	=	507.6 cf
					=	90 bbls

TOC = 0 ft

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STIMULATION 。CEMENTING 。COMPLETION SERVICES 。SERVICE TOOLS 。COILED TUBING PRODUCTION CHEMICALS 。CASING AND TUBING RUNNING SERVICES 。PIPELINE SERVICES 。WELL CONTROL



#### FLUID SPECIFICATIONS

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FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Cement Slurry	_ 508	/ 1.3 =	380 sacks Premium Plus C Cement + 0.005 Ibs/sack Static Free + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-6L + 56.2% Fresh Water
Displacement CEMENT PROPERTI	ES	47.1 b	bls Displacement Fluid
			SLURRY NO. 1
Slurry Weight (ppg)			14 80
Slurry Yield (cf/sack)			1.35
Amount of Mix Water (g			6.34
Amount of Mix Fluid (gr	os)		6.34

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STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING PRODUCTION CHEMICALS & CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL

Gr4129



#### **Product Material**

1

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
715	lbs	Calcium Chloride	287.79
95	lbs	Cello Flake	151.95
1	ea	Cement Plug, Rubber, Top 13-3/8 in	385.00
380	94lbs	Premium Plus C Cement	4,681.60
2	gals	FP-6L	65.45
2	lbs	Static Free	25.06
		Product Material Subtotal:	\$5,596.85

#### Service Charges

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	ea 🗼	Personnel Surcharge - Cement Svc	152.00
402	cu ft	Bulk Materials Service Charge	552.95
		Service Charges Subtotal.	\$704.95

#### Equipment

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QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	4hrs	Cement Pump Casing, 0 - 1000 ft	838.25
1	job	Fas-Lok Cement Head	208.25
1	job	Data Acquisition, Cement, Standard	539.00
70	miles	Mileage, Heavy Vehicle	209.48
70	miles	Mileage, Auto, Pick-Up or Treating Van	118.34
		Equipment Subtotal:	\$1,913.32

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

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STIMULATION 。 CEMENTING CASING AND TUBING I	• COMPLETION SERVICES • SERVICE TOOLS • COILED TUBING • PRODUCTION CHEMICALS RUNNING SERVICES • PIPELINE SERVICES • WELL CONTROL • CHEMICAL SERVICES	Gr4161



#### Freight/Delivery Charges

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QTY 639	UNIT	Bulk Delivery, Dry Products	TDESCRIPTION	AMOUNT
		Buik Beilvery, Dry Floducts		637.40
			Freight/Delivery Charges Subtotal:	\$637.40
`			TOTAL:	\$8,852.52

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STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING & PRODUCTION CHEMICALS
CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL & CHEMICAL SERVICES

#### WELL DATA

#### ANNULAR GEOMETRY

ANNULAR I.D.	DEPTH(ft)		
(in)	MEASURED	TRUE VERTICAL	
12.715 CASING	340	340	
12.250 HOLE	3,950	3,950	

#### SUSPENDED PIPES

DIAME	TER (in)	WEIGHT	DĘP	'TH(ft)
O.D.	I.D.	(lbs/ft)	MEASURED	TRUE VERTICAL
9.625	9 001	32.3	3,950	3,950

Float Collar set @	3,910 ft
Mud Density	8.50 ppg
Est. Static Temp.	106 ° F
Est. Circ. Temp.	98 ° F

#### **VOLUME CALCULATIONS**

340 ft	x	0.3765 cf/ft	with	0 % excess	=	128.0 cf
2,810 ft	х	0.3132 cf/ft	with	100 % excess	=	1760.1 cf
800 ft	х	0.3132 cf/ft	with	50 % excess	=	375.8 cf
40 ft	х	0 4419 cf/ft	with	0 % excess	=	17.7 cf (inside pipe)
			TOTAL	SLURRY VOLUME	=	2281.6 cf
					=	407 bbls

TOC Lead: 0 ft TOC Tail: 3150 ft

STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING PRODUCTION CHEMICALS & CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL



#### **FLUID SPECIFICATIONS**

FLUID	VOLUME CU-FT	VOLUME	OUNT AND TY	PE OF CEMENT
Lead Slurry	1888	Ce So Ibs	ement + 0.005 lb dium Chloride +	Poz (Fly Ash):Premium Plus C s/sack Static Free + 5% bwow 0.25 lbs/sack Cello Flake + 5 0.005 gps FP-6L + 10% bwoc % Fresh Water
Tail Slurry	394	lbs 0.2	s/sack Static Fre	n Plus C Cement + 0.005 e + 1% bwoc Calcium Chloride + o Flake + 0.005 gps FP-6L + r
Displacement CEMENT PROPERTI	ES	307.7 bbl	s Displacement I	Fluid
				LURRY NO. 2
Slurry Weight (ppg)			11.80	14.80
Slurry Yield (cf/sack)			2 45	1.34
Amount of Mix Water (g	. ,		13.57	6 33
Amount of Mix Fluid (gp	s)		13.57	6.33

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STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING PRODUCTION CHEMICALS & CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL

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Prod	uct	Mate	rial

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
278	lbs	Calcium Chloride	111.90
6468	lbs	Bentonite	1,063.99
3850	lbs	LCM-1	1,468.78
267	lbs	Cello Flake	427.07
385	74lbs	Poz (Fly Ash)	1,677.64
4353	lbs	Sodium Chloride	700.83
1	ea	Cement Plug, Rubber, Top 9-5/8 in	126.70
680	94lbs	Premium Plus C Cement	8,377.60
6	gals	FP-6L	196.35
6	lbs	Static Free	75.18
		Product Material Subtotal:	\$14,226.04

#### Service Charges

QTY	UNIŢ	PRODUCT DESCRIPTION		NET AMOUNT
1	ea	Personnel Surcharge - Cement Svc		152.00
1333	cu ft	Bulk Materials Service Charge		1,833.54
- <i>n</i>		Servic	e Charges Subtotal:	\$1,985,54

#### Equipment

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	6hrs	Cement Pump Casing, 3001 - 4000 ft	1,522.50
1	job	Fas-Lok Cement Head	208.25
1	job	Data Acquisition, Cement, Standard	539.00
140	miles	Mileage, Heavy Vehicle	418 95
70	miles	Mileage, Auto, Pick-Up or Treating Van	118.34
1	job	Field Storage Bin, Up To 5 Days	418.25
	1	Equipment Subtotal:	\$3,225.29

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#### Freight/Delivery Charges

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QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1883	tonmi	Bulk Delivery, Dry Products	1,878.29
		Freight/Delivery Charges Subtotal:	\$1,878.29
		TOTAL:	\$21,315.16

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STIMULATION . CEMENTING	· COMPLETION SERVICES · SERVICE TOOLS · COILED TUBING · PRODU	ICTION CHEMICALS
CASING AND TUBING R	RUNNING SERVICES . PIPELINE SERVICES . WELL CONTROL . CHEMICA	L SERVICES

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#### **FLUID SPECIFICATIONS**

VOLUME CU-FT		VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
316	1	.9	= 350 sacks Class H Cement + 0.005 lbs/sack Static Free + 5% bwow Sodium Chloride + 1.2% bwoc CD-31 + 0.005 gps FP-6L + 26.7% Fresh Water
RTIES			
			PLUG
			NO. 1
opg)			18.00
sack)			0.90
Amount of Mix Water (gps)			3.01
Fluid (gps)			3.01
	CU-FT 316 RTIES ppg) sack)	CU-FT 316 / RTIES Opg) sack) Water (gps)	<u>CU-FT</u> <u>FACTOR</u> 316 / 9

Gr4131

STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING PRODUCTION CHEMICALS & CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL



Tiouuci	wateria		
QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
350	94lbs	Class H Cement	3,062.50
395	lbs	CD-31	1,659.00
440	lbs	Sodium Chloride	70.84
2	gals	FP-6L	65.45
2	lbs	Static Free	25.06
		Product Material Subtotal:	\$4,882.85

#### Service Charges

**Droduct Motorial** 

QTY	UNIT	NET	
			AMOUNT
1	ea	Personnel Surcharge - Cement Svc	152.00
1	4hrs	Batch Mix Truck, 100-150 bbl, 1st 4 Hrs	988.75
366	cu ft	Bulk Materials Service Charge	503.43
		Service Charges Subtotal:	\$1,644.18

#### Equipment

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	8hrs	Cement Pump Tubing, 9001 - 10000 ft	3,692.50
1	job	Data Acquisition, Cement, Standard	539.00
140	miles	Mileage, Heavy Vehicle	418.95
70	miles	Mileage, Auto, Pick-Up or Treating Van	118.34
<u> </u>		Equipment Subtotal.	\$4,768.79

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STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING & PRODUCTION CHEMICALS CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL & CHEMICAL SERVICES



#### Freight/Delivery Charges

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
590	tonmi	Bulk Delivery, Dry Products	588.53
. <u> </u>		Freight/Delivery Charges Subtotal:	\$588.53
		TOTAL:	\$11,884.35

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#### WELL DATA

#### ANNULAR GEOMETRY

ANNULAR I.D.	DEI	PTH(ft)
(in)	MEASURED	TRUE VERTICAL
9.001 CASING	3,950	3,950
8.750 HOLE	9,130	8,730

#### SUSPENDED PIPES

DIAMET	ER (in)	WEIGHT	DEF	PTH(ft)
O.D.	I.D.	(İbs/ft)	MEASURED	TRUE VERTICAL
7.000	6.094	32	9,130	8,730

Float Collar set @	9,090 ft
Mud Density	8.90 ppg
Est. Static Temp.	141 ° F
Est. Circ. Temp.	128 ° F

#### **VOLUME CALCULATIONS**

500 ft 3,550 ft 1,630 ft 40 ft	x x x x	0.1746 cf/ft 0.1503 cf/ft 0.1503 cf/ft 0.2026 cf/ft	with with with ´with <b>TOTAL</b>	0 % excess 50 % excess 50 % excess 0 % excess SLURRY VOLUME		87.3 cf 800.5 cf 367.6 cf 8.1 cf (inside pipe) 1263.5 cf 225 bbls
					=	225 bbls

TOC Lead[.] 3450 ft TOC Tail: 7500 ft

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STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING PRODUCTION CHEMICALS & CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL



#### **FLUID SPECIFICATIONS**

FLUID	VOLUME CU-FT	VOLUM FACTO	-
Lead Slurry	888	1 2.4	<ul> <li>365 sacks (50:50) Poz (Fly Ash):Premium Plus H Cement + 0.125 lbs/sack Cello Flake + 5 lbs/sack LCM-1 + 10% bwoc Bentonite + 0.2% bwoc FL- 52A</li> </ul>
Tail Slurry	376	/ 1.1	= 320 sacks Premium Plus H Cement + 1% bwoc FL- 62 + 0.4% bwoc FL-52A + 45.8% Fresh Water
Displacement CEMENT PROPERT	IES	327	7.9 bbls Displacement
		,	SLURRY SLURRY NO. 1 NO. 2
Slurry Weight (ppg) Slurry Yield (cf/sack) Amount of Mix Water (	gps)		11.6015.602.451.1913.735.16

SLURRIES WILL BE TESTED BEFORE PUMPING JOB.

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STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING PRODUCTION CHEMICALS & CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL



Product	Materia		
QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
3066	lbs	Bentonite	504.36
1825	lbs	LCM-1	696.24
46	lbs	Cello Flake	73.58
183	74lbs	Poz (Fly Ash)	797.42
1	ea	Cement Plug, Rubber, Top 7 in	76.48
182	lbs	FL-52A	1,535.17
4	gals	FP-6L	130.90
301	lbs	FL-62	2,033.26
4	lbs	Static Free	50.12
503	94lbs	Premium Plus H Cement	5,316.71
		Product Material Subtotal:	\$11,214.24

#### **Service Charges**

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	ea	Personnel Surcharge - Cement Svc	152.00
790	cu ft	Bulk Materials Service Charge	1,086.65
		Service Charges Subtotal:	\$1,238.65

#### Equipment

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	8hrs	Cement Pump Casing, 9001 - 10000 ft	3,237.50
1	job	Fas-Lok Cement Head	208.25
1	job	Data Acquisition, Cement, Standard	539 00
70	miles	Mileage, Heavy Vehicle	209.48
70	miles	Mileage, Auto, Pick-Up or Treating Van	118.34
		Equipment Subtotal:	\$4,312.57

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CASING AND TUBING RUNNING SERVICES . PIPELINE SERVICES .	WELL CONTROL . CHEMICAL SERVICES

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#### Freight/Delivery Charges

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1158	tonmi	Bulk Delivery, Dry Products	1,155.11
		Freight/Delivery Charges Subtotal:	\$1,155.11
		TOTAL:	\$17,920.57

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#### WELL DATA

#### ANNULAR GEOMETRY

ANNULAR I.D.	DEPTH(ft)			
(in)	MEASURED	TRUE VERTICAL		
6.094 CASING	8,924	8.730		
6.125 HOLE	11,603	8,730		

#### SUSPENDED PIPES

DIAMETE	R (in)	WEIGHT	DEPTH(ft)		
<u> </u>	I.D.	(lbs/ft)	MEASURED TRUE VERTI		
4.500	4 000	11.6	11,603	8,730	

Drill Pipe  3.5 (in) OD,  2.764 (in) ID,  13.3 (Ibs/ft) set @	8,980 ft
Drill Pipe 4.5 (in) OD, 4.0 (in) ID, 11.6 (lbs/ft) set @	11,603 ft
Depth to Top of Liner	8,980 ft
Float Collar set @	11,603 ft
Mud Density	8.80 ppg
Mud Type	Water Based
Est. Static Temp.	145 ° F
Est. Circ. Temp.	129 ° F

#### **VOLUME CALCULATIONS**

2,623 ft	х	0.0942 cf/ft	with	110 % excess	=	519 cf
			TOTAL S	LURRY VOLUME	=	519 cf
					=	92 bbls

TOC: 8980 ft



#### FLUID SPECIFICATIONS

Spacer	20.0 bbls Surfactant Wash + 0 5 gpt S-150 @ 8.34 ppg						
FLUID	VOLUME CU-FT	VOLUME FACTOR					
Cement Slurry	519	/ 1.3	<ul> <li>390 sacks (50:50) Poz (Fly Ash):Class H Cement + 3% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.2% bwoc CD-32 + 2% bwoc Bentonite + 0.3% bwoc Sodium Metasilicate + 0.5% bwoc FL-52A + 61.1% Fresh Water</li> </ul>				
Displacement		107.4	4 bbls Displacement				
CEMENT PROPERT	IES						
			SLURRY NO. 1				
Slurry Weight (ppg)			14 00				
Slurry Yield (cf/sack)			1.33				
Amount of Mix Water (	gps)		6.16				
Estimated Pumping Tir	me - 70 BC (	HH:MM)	3:15				
Free Water (mls) @ ° Fluid Loss (cc/30min)	F @ 45 ° an	gle	0.0				
at 1000 psi and 14	45 ° F		212.0				

#### RHEOLOGIES

FLUID		TEMP	600	300	200	_ 100	6	3
Cement Slurry		80 ° F			73		15	10
Cement Slurry	@	145 ° F	105	78	62	46	16	10

Conduct Field Blend tests prior to the job. Email results to Mike Beggs.

Customer has requested:

-Thickening time range: 3-3.5 hrs

#### -0 Free water

-Fluid Loss: 200-500 cc's

STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING PRODUCTION CHEMICALS & CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL



Product N	Material
-----------	----------

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
195	94lbs	Class H Cement	1,706.25
656	lbs	Bentonite	107 91
99	lbs	Sodium Metasilicate	127.17
66	lbs	R-3	76.00
195	74lbs	Poz (Fly Ash)	849.71
601	lbs	Sodium Chloride	96.76
164	lbs	FL-52A	1,383.34
66	lbs	CD-32	274.89
1	gals	S-150	12.78
		Product Material Subtotal:	\$4,634.81

#### Service Charges

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	ea	Personnel Surcharge - Cement Svc	152.00
420	cu ft	Bulk Materials Service Charge	577.71
		Service Charges Subtotal:	\$729.71

#### Equipment

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
		1 1, 1 5	AMOUNT
1	8hrs	Cement Pump Tubing, 13001 - 14000 ft	8,575.00
8	ea	4.5" x 5.75" Rigid Body Centralizers	1,260.00
1	job	Fas-Lok Cement Head	208.25
1	job	Data Acquisition, Cement, Standard	539.00
140	miles	Mileage, Heavy Vehicle	418.95
70	miles	Mileage, Auto, Pick-Up or Treating Van	118.34
		Equipment Subtotal:	\$11,119 54

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.

Report Printed on June 25, 2009 1 43 PM Page 18 Gr4181 STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING & PRODUCTION CHEMICALS CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL & CHEMICAL SERVICES



#### **Freight/Delivery Charges**

QTY	UNIT	PRODU	CT DESCRIPTION	NET AMOUNT
602	tonmi	Bulk Delivery, Dry Products		600.50
			Freight/Delivery Charges Subtotal	\$600.50
			TOTAL:	\$17,084.56

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 estimated only and may vary depending on the work actually performed. Pricing does not include federal, state and local taxes or royalties.

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Report Printed on June 25, 2009 1 43 PM Page 19 STIMULATION & CEMENTING & COMPLETION SERVICES & SERVICE TOOLS & COILED TUBING & PRODUCTION CHEMICALS CASING AND TUBING RUNNING SERVICES & PIPELINE SERVICES & WELL CONTROL & CHEMICAL SERVICES

Gr4161



#### 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: JUN-25-09 01:43

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#### PRODUCT DESCRIPTIONS

#### Bentonite

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

#### CD-31

A free flowing high molecular weight dispersant used to lower slurry viscosity and help provide turbulent flow properties at reduced pump rates. CD-31 also assists in fluid loss control.

#### CD-32

A patented, free-flowing, water soluble polymer that is an efficient and effective dispersant for primary and remedial cementing.

#### **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 H Cement**

Class H cement is an API type, all purpose oil well cement which is used without modification in wells up to 8,000 ft It possesses a moderate sulfate resistance. With the use of accelerators or retarders, it can be used in a wide range of well depths and temperatures.

#### FL-52A

A water soluble, high molecular weight fluid loss additive used in medium to low density slurries. It is functional from low to high temperature ranges

#### FL-62

A patented dry blend of water soluble polymers that are formulated to control the loss of fluid during cementing operations. A dispersant and bonding additive are proportioned to deliver consistent performance and control fluid loss in primary and squeeze cementing applications at low to moderate temperatures.

#### FP-6L

A clear liquid that decreases foaming in slurries during mixing.

#### 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.

#### **Premium Plus H Cement**

Class H cement is an API type, all purpose oil well cement which is used without modification in wells up to 8,000 ft. It possesses a moderate sulfate resistance. With the use of accelerators or retarders, it can be used in a wide range of well depths and temperatures.

### PRODUCT DESCRIPTIONS (Continued)

#### R-3

A low temperature retarder used in a wide range of slurry formulations to extend the slurry thickening time.

#### S-150

A blend of amphoteric and nonionic surfactants, recommended for use in water based stimulation treatments.

#### Sodium Chloride

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

#### Sodium Metasilicate

An extender used to produce an economical, low density cement slurry.

#### Static Free

An anti-static additive used to prevent air entrainment due to agglomerated particles. Can be used in Cementing and Fracturing operations to aid in the flow of dry materials.



# Marshall & Winston, Inc.

# Planned Wellpath Report Plan #1 Page 1 of 3



REFER	ENCE WELLPATH IDENTIFICATION	an a	
Operator	Marshall & Winston, INC	Slot	No. 1H SHL
Area	Chaves County, NM	Well	No. 1H
Field	(Medlin 9) Sec 9, T15S, R31E	Wellbore	No. 1H PWB
Facility	Medlin Fee 9 No. 1H		

REPORT SETUP	INFORMATION	- And Carlo	
	NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999937	Report Generated	6/24/2009 at 4:58:11 PM
Convergence at slot	0.28° East	Database/Source file	WA_Midland/No1H_PWB.xml

WELLPATH LOCAT	ION	เลงต _า ที่นาง ทองสมมัด _{กา} สุดท	รรรด - และเขาไปเป็นสรรมแหล่งคองไปเหลือของไปเหลือของเป็นสูงของ -	เหมตุลายและสุขปุญชาตามีทุกการเหตุการเหตุการสาวาร	สมัยแข้งของสะ และ และ และ การ และ การ เรื่อง การ (1997) สมัยแข้งไป เรื่อง เร	ราสูสสุข สาขารสาของไฟทาด (Jone Harrison (Jone) สามันระหารสาข (Jone) สาขารสาขารสาขารสาขารสาขารสาขารสาขารสาขา	
	Local coo	rdinates	Grid co	ordinates	Geographic coordinates		
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude	
Slot Location	0.00	0.00	655246.70	738699.40	33°01'46.991"N	103°49'36.441"W	
Facility Reference Pt			655246.70	738699.40	33°01'46.991"N	103°49'36.441"W	
Field Reference Pt			653095.50	736910.00	33°01'29.388"N	103°50'01.809"W	

WELLPATH DATUM		na shina na shekara na shekara na sa maranin kuna kika niya ka ka ka ka shekara ka sanaya na sanaya na sana ma	
Calculation method	Minimum curvature	Rig on No. 1H SHL (RT) to Facility Vertical Datum	0.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 1H SHL (RT) to Mean Sea Level	4429.00ft
Vertical Reference Pt	Rig on No. 1H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 1H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	225.41°



**Planned Wellpath Report** 

Plan #1





 REFERENCE WELLPATH IDENTIFICATION

 Operator
 Marshall & Winston, INC
 Slot
 No. 1H SHL

 Area
 Chaves County, NM
 Well
 No. 1H

 Field
 (Medlin 9) Sec 9, T15S, R31E
 Wellbore
 No. 1H PWB

 Facility
 Medlin Fee 9 No. 1H
 Image: County of the sec section of the secti

#### WELLPATH DATA (36 stations) † = interpolated/extrapolated station

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	DLS	Comments
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[°/100ft]	
0.00	0.000	225.408	0.00	0.00	0.00	0.00	0.00	TIE ON
8390.00	0.000	225.408	8390.00	0.00	0.00	0.00	0.00	EST. KOP
8490.00†	16.852	225.408	8488.56	, 14.60	-10.25	-10.40	16.85	
8590.00†	33.703	225.408	8578.66	57.15	-40.12	-40.70	16.85	
8690.00†	50.555	225.408	8652.56	123:99	-87.04	• • • • • • • • • • • • • • • • • • • •	16.85	the first of the second states of the
8790.00†	67.407	225.408	8703.91	209.38	-146.99	-149.10	16.85	
8890.00†	84.259	225.408	8728.29	305.99	-214.82	-217.90	16.85	
8924.07	90.000	225.408	8730.00	340.00	-238.70	-242.12	16.85	END OF CURVE
8990.00†	90.000	225.408	8730.00	405.93	-284.98	-289.07	0.00	
9090.00†	90.000	225.408	8730.00	505!93	-355.19	-360.28	0.00	A CARLES MENARS
9190.00†	90.000	225.408	8730.00	605.93	-425.39	-431.50	0.00	
9290.00†	90.000	225.408	8730.00	705.93	-495.60	-502.71	0.00	
9390.00†	90.000	225.408	8730.00	805.93	-565.81	-573.92	0.00	
9490.00†	90.000	225.408	8730.00	905.93	-636.01	-645.13	0.00	
9590.00t	90.000	225.408	8730.00	1005.93	-706.22	716.35	. 0.00	
9690.00†	90.000	225.408	8730.00	1105.93	-776.42	-787.56	0.00	
9790.00†	90.000	225.408	8730.00	1205.93	-846.63	-858.77	0.00	
9890.00†	90.000	225.408	8730.00	1305.93	-916.83	-929.98	0.00	
9990.00†	90.000	225.408	8730.00	1405.93	-987.04	-1001.20	0.00	
10090.00†j	<u>90.000</u>	225.408	8730.00	1505.93	<u>*-1057.24</u>	2 - 1072.4 Î	0.00	
10190.00†	90.000	225.408	8730.00	1605.93	-1127.45	-1143.62	0.00	
10290.00†	90.000	225.408	8730.00	1705.93	-1197.65	-1214.83	0.00	
10390.00†	90.000	225.408	8730.00	1805.93	-1267.86	-1286.05	0.00	
10490.00†	90.000	225.408	8730.00	1905.93	-1338.06	-1357.26	0.00	
10590.00†	90.000	225.408	8730.00	2005.93	1408.27	•	0.00	
10690.00†	90.000	225.408	8730.00	2105.93	-1478.48	-1499.68	0.00	
10790.00†	90.000	225.408	8730.00	2205.93	-1548.68	-1570.90	0.00	
10890.00†	90.000	225.408	8730.00	2305.93	-1618.89	-1642.11	0.00	
10990.00†	90.000	225.408	8730.00	2405.93	-1689.09	-1713.32	0.00	
11090.00†	90.000	225.408	<u>\$ 8730.00</u>	2505.93	-1759.30	1784.53	0.00	States the states



Planned Wellpath Report Plan #1 Page 3 of 3



REMER	ENCLE WIELLIPATHE IIDLENTINIFICATION	1	a na sa tu na sa sa tu na sa t I
Operator	Marshall & Winston, INC	Slot	No. 1H SHL
Area	Chaves County, NM	Well	No. 1H
Field	(Medlin 9) Sec 9, T15S, R31E	Wellbore	No. 1H PWB
Facility	Medlin Fee 9 No. 1H		

WELLPATH D	VELLPATH DATA (36 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments			
11190.00†	90.000	225.408	8730.00	2605.93	-1829.50	-1855.75	0.00				
11290.00†	90.000	225.408	8730.00	2705.93	-1899.71	-1926.96	0.00				
11390.00†	90.000	225.408	8730.00	2805.93	-1969.91	-1998.17	0.00				
11490.00†	90.000	225.408	8730.00	2905.93	-2040.12	-2069.38	0.00				
11590:00†	90.000	225.408	8730.00	3005.93	-2110.32	-2140.59	0.00	n stop, internet			
11602.98	90.000	225.408	8730.00 ¹	3018.91	-2119.44	-2149.84	0.00	No 1H PBHL			

HOLE & CASING SECTIONS Ref Wellbore: No. 1H PWB Ref Wellpath: Plan #1										
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]	
8.75in Open Hole	8390.00	9124.00	734.00	8390.00	8730.00	0.00	0.00	-379.06	-384.50	
6.125in Open Hole	9124.00	11602.98	2478.98	8730.00	8730.00	-379.06	-384.50	-2119.44	-2149.84	

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
1) Fee 9 No. 1H PBHL	11602.98	8730.00	-2119.44	-2149.84	653097.00	736580.10	33°01'26.123"N	103°50'01.809"W	point

SURVEY PRO	SURVEY PROGRAM Ref Wellbore: No. 1H PWB Ref Wellpath: Plan #1										
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore							
0.00	11602.98	NaviTrak (Standard)		No. 1H PWB							





## **5M BOPE SCHEMATIC**

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June 30, 2009

## RECEIVED

Oil Conservation Division 1625 North French Drive Hobbs, New Mexico 88240

JUL 0 2 2009 HOBBSOCD

Re: OGRID No. 014187 Medlin Fee 9-1H, Medlin Fee 8-1H and Medlin Fee 8-2H Chaves County, New Mexico

Gentlemen:

Vernon D. Dyer is hereby authorized to act on the behalf of Marshall & Winston, Inc. in all regulatory matters relating to approval of and the drilling and completion of the above captioned wells. Should there be any questions regarding this matter, you are welcome to contact me or Gabriel Herrera at (432) 684-6373.

Very truly yours,

Tom M. Brandt President

TMB/glb