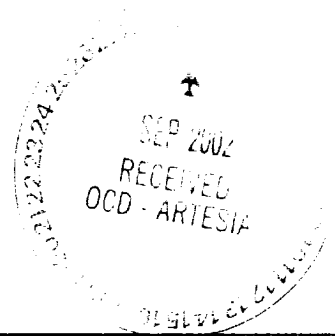


GRUY PETROLEUM MANAGEMENT COMPANY

CASING & CEMENTING REPORT

CASING SIZE: 5-1/2"



WELL: Pennzoil "9" Federal Com # 3			AFE 22137		JOB DATE: 7/26/02	
Drl TD: 12,000'	Log TD: 12,005'	Last Csg: 9 5/8" @ 3,815' KB	Hole Size: 8 3/4"		Rig: Patterson-UTI Rig # 80	

Items	Item Description (from top)	Weight	Grade	Thread	Cond.	Length	RKB Setting Depth
12	5 1/2" Casing	17#	P-110HC	8rd LT&C	New	529.81	0' to 521'
146	5 1/2" Casing	17#	N-80	8rd LT&C	New	6489.47	521' to 7,011'
1	5 1/2" Halliburton DV Tool				New	2.13	7,011' to 7,013'
42	5 1/2" Casing	17#	N-80	8rd LT&C	New	1896.15	7,013' to 8,909'
70	5 1/2" Casing	17#	P-110HC	8rd LT&C	New	3044.43	8,909' to 11,954'
1	5 1/2" Halliburton Float Collar				New	0.90	11,954' to 11,955'
1	5 1/2" Casing	17#	P-110HC	8 rd LT&C	New	44.17	11,955' to 11,999'
1	5 1/2" Halliburton Float Shoe				New	1.30	11,999' to 12,000'

DELIVERED		IN HOLE		RETURNED		Total:	12,008.36
Footage	12,266.70	12,008.36		0		-Cut Off	26.36
Joints:	275	271		0		+RKB	18.00
Trucking Co.	Arrow / McClatchy Bros.			N/A		Set Depth	12,000.00

MARKER DEPTH:	11,402' to 11,424'	11,054' to 11,093'	9,696' to 9,732'	8,997' to 9,034'	
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CEMENTING AIDS CENTRALIZERS

Depth	Type	Depth	Type	Depth	Type	Depth	Type	Depth	Type	Depth	Type
11,985		11,226		10,525							
11,865		11,137		10,437							
11,777		11,054		7,059							
11,689		10,966		6,965							
11,600		10,878									
11,513		10,789									
11,424		10,702									
11,314		10,614									

WIPERS / SCRATCHERS

Depth Range	Type	Spacing	Depth Range	Type	Spacing	Depth Range	Type	Spacing

DISPLACEMENT

VOLUME			Fluid & Slurry Additives			Density	Yield	Mix Water (gal/sx)
Sx	Bbls	CuFt	Flush / Spacer / Cement Slurry / Displacement					
			1st Stage					
600	257	1,446	(Lead) Interfill "H" + 1/4 Flocele + 0.1% HR-7			11.90	2.41	13.67
400	116	652	(Tail) Super "H" + 5# Gilsonite + 2.5# Salt + 0.4% CFR-3 + 0.5%			13.20	1.63	7.80
			LAP-1 + 0.25# D-AIR 3000 + 0.3% HR-7 + 1/4# Flocele					
			2nd Stage					
625	268	1,506	(Lead) Interfill "C" + 1/4 Flocele			11.90	2.41	13.67
100	21	118	(Tail) Premium Cement			15.60	1.18	5.23

CEMENTING OPERATIONS

Circ Time: 2 / 6	Bottom Plug Used: Halliburton	Cmt Mix Time: 59 / 39	Batch Mixed: No	Pump Time: 109 / 69
Top Plug Used:	Disp Time: 45 / 30	Plug Bumped: yes / yes	Calc/Actual Disp: 277.52 / 280 - 162.85 / 162	
Pipe Movement: No	Circ While Cmtng: full / full	Cmt To Surf: No / No	TOC @ : 7,011' cal. / 3,300' cal.	
Circ Press-Circ: 600 / 400	Begin: 460 / 360	Middle: 215 / 100	End: 1325 / 895	Bump Plug: 2000 / 2580
Comments: Each stage of cement was preceded by 500 gals. Super Flush 102 - cement calculations based on 25% excess of open hole log caliper (Halliburton Spectral Density Dual Spaced Neutron Spectral GR Log dated 7/24/02 before final prints - Caliper is wrong on final prints)				

OPERATIONS & EQUIPMENT COSTS

Casing: \$90,288	Float Equip:	Casing Inspec. \$1,806	Liner Equip:	Cmtg: \$25,878
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VENDORS

Csg Crew: Bull Rogers, Inc.	Cementing: Halliburton	Float Eq: Halliburton	Lnr Eq:
	Mudline Eq:	Thrd Insp: Connection Inspec.	Other:

Operator's Representative:	John R. Dollahan	Date:	July 27, 2002
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