

- W E G E -
WESTERN GEO-ENGINEERS

GEOLOGIST

COMPANY NORTHWEST EXPLORATION COMPANY
WELL Sawyer Rapids #1
CONTRACTOR J & N Drilling Company Rig#1

STATE Oregon
COUNTY Douglas
LOCATION 2099'S & 250' W SEC 3 TWP 23S RNG 9W
of NE crn
COMPANY - ENGINEER Bariod-Ron Duran/Northern Mud- Jim Jones

CASING PROGRAM: 9 5/8" inch at 682 ft.
_____ inch at _____ ft.
_____ inch at _____ ft.
TOTAL DEPTH _____ ft.

DATE	DEPTH feet	WEIGHT lb/gal	VISCOSITY		Yp	GELS 10 sec/ 10 min	pH	FILTRATION			FILTRATE ANALYSIS			SAND			RETORT			CEC Mud, me/ml	REMARKS AND TREATMENT		
			Sec API of	PV of				10 sec/ Motor	ml API	HTHP of	Calc Dred	Cl ppm	Ca ppm	%	Sand %	Oil %	Water %						
4/12/80	44'	spudded																					
4/13	53'		45																				
4/14	150'	9.0	45	20	10	4/10	7.3	10.0	---	2+	0.15	100	40	1/2	8	0	92	---					
4/15	280	8.6	45	10	18	10/25	10.2	20	---	2+	0.15	80	40	tr	2	0	98	---					
4/16	540	8.6	43	12	15	5/20	10.0	10	---	2+	0.3	80	40	tr	2+	0	98	---					
4/17	687	8.6	40	10	12	4/15	9.9	10	---	2	0.2	70	40	1/2	2	0	98	---					
4/18	687	8.5	42	20	8	3/7	8.5	10	---	2	0.2	70	tr	tr	2	0	98	---				run casing/switch mud to cypan/gel	
4/19	825	8.6	40	13	7	2/4	10.5	7	---	2	0.5	150	100	1/2	2	0	98	---				nondispersed.	
4/20	1116	8.6	38	10	5	1/3	9.2	8.2	---	2	0.2	100	100	tr	2	0	98	---					
4/21	1214	8.5	37	9	5	1/3	9.0	8.4	---	2	0.2	100	80	tr	2+	0	98	---					
4/22	1239	8.5	37	10	5	1/2	10	8.2	---	2	1.0	130	80	1/2	4	0	96	---					
4/23	1450	8.7	45	18	9	3/7	10.0	8.0	---	2	1.0	130	40	1/2	3	0	97	---					
4/24	1745	8.8	39	15	7	1/5	9.8	8.0	---	2	1.0	130	30	1/2	4	0	96	---					
4/25	1930	8.7	38	11	6	1/2	9.8	8.2	---	2	1.0	130	80	1/2	4	0	96	---					
4/26	2130	8.8	38	11	5	1/2	9.0	8.0	---	2	1.0	100	280	1/2	5	0	95	---				Increase in Ca	
4/27	2335	8.8	38	10	5	0/3	8.5	8.5	---	2	1.0	100	300	1/2	5	0	95	---				27	
4/28	2530	9.1	40	16	5	1/3	8.5	7.9	---	2	1.0	100	620	1/2	6	0	94	---				28	
4/29	2746	9.0	40	16	6	1/3	7.5	7.0	---	2	1.0	100	680	1/2	6	0	94	---				29	
4/30	2853	9.2	39	15	5	1/3	7.5	7.5	---	1	1.0	100	600	tr	8	0	92	---				27.5	
5/1	3056	9.1	37	10	5	0/2	8.0	7.5	---	1	1.0	120	680	tr	8	0	92	---				27.0	
5/2	3215	9.3	37	10	5	0/2	8.5	8.0	---	1	1.0	150	720	1/2	8	0	92	---				25.0	
5/3	3360	9.2	35	8	3	0/2	8.8	8.7	---	1	1.0	150	800	1/2	8	0	92	---				25	
5/4	3470	9.2	36	9	4	0/2	9.0	9.3	---	1	1.0	150	800	1/2	8	0	92	---				24	
5/5	3663	9.1	38	16	4	0/2	9.5	10.0	---	2	1.0	150	800	1/2	9	0	91	---				25	
5/5	3740	8.9	37	15	3	1/3	9.0	10.0	---	2	1.0	150	800	tr	5	0	95	---				Change mud co. from Bariod to Northern Mud.	
5/6	3830	9.0	40	18	8	2/8	10.0	9.8	---	2	1.0	150	40	tr	10	0	90	---				Ca decrease, add tr diesel to mud.	
5/7	3990	8.9	36	17	4	1/4	8.5	10.0	---	2	1.0	150	40	tr	8	0	92	---					
5/8	4120	8.9	38	16	7	1/6	9.0	9.6	---	2	1.0	150	40	tr	8	0	92	---					
5/9	4290	8.8	37	16	6	1/4	9.0	9.8	---	2	1.0	150	40	tr	8	0	92	---				Strike @1100hrs thru 5/11/80.	
5/12	4350	8.8	36	15	4	1/4	9.0	10	---	2	1.0	150	40	tr	7	0	93	---					
5/13	4433	8.9	37	16	8	1/5	9.0	9.0	---	2	1.0	150	40	tr	8	0	92	---					
5/14	4565	9.0	38	18	8	2/6	9.0	9.8	---	2	1.0	150	40	tr	8	0	92	---					
5/15	4720	8.9	38	17	8	2/8	9.0	9.8	---	2	1.0	150	40	tr	8	0	92	---					
5/16	4874	8.9	38	18	8	1/5	9.5	9.8	---	2	1.0	150	40	tr	8	0	91	---					
5/17	4938	9.0	38	17	8	2/6	9.0	9.8	---	2	1.0	200	39	tr	8	0	91	---					

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COUNTY Douglas
2099'S & 250'W of

inch at _____ ft.

CONTRACTOR J & N Drilling Company Rig #1

LOCATION NE cor SEC 3 TWP 23S RNG 9W

inch at _____ ft.

STOCKPOINT _____

DATE _____

COMPANY - ENGINEER Northern Mud - Kenny Lynch

TOTAL DEPTH _____ ft.

DATE	DEPTH feet	WEIGHT lb/gal	VISCOSITY		Yp	GELS 10 sec/ 10 min	pH	FILTRATION			FILTRATE ANALYSIS				SAND %	RETORT			CEC Mud, me/ml	REMARKS AND TREATMENT
			Sec API of	PV of				ml API	HTHP of	Cake lbs/sq ft	Cl ppm	Ca ppm	%	Solids %		Oil %	Water %			
5/18/80	5115	9.0	38	17	7	1/5	9.0	9.7	---	2	.3	.8	200	40	tr	7	0	93	--	Lost DC'S in hole.
5/19/80	5200	9.1	38	15	5	1/5	9.0	9	---	2	.3	.8	180	40	tr	10	0	90	--	
5/20-21/80	make up	fish tools				fish for DC'S														Lost 2 1/2 stds pipe, DC'S & bit in hole, fish, thru 5/23/80
5/22/80	5262	8.9	39	12	8	2/7	9	9.7	---	2	.3	.8	200	40	tr	7	0	93		
5/24/80	work on pumps.																			work on pumps.
5/25/80	5272	8.9	36	15	3	1/3	9	10.0	---	2	.4	.8	150	800	tr	5	0	95		
5/26/80	5272	8.8	38	17	8	2/6	9	10.2		2	.3	.9	200	40	tr	10	0	90		Twisted off, fish, Run Schlumberger logs.
5/27/80	5414	9	39	19	8	2/6	9	9.6		2	.3	.9	200	39	tr	4.2		95.8		
5/28/80	5562	9	39	18	7	2/7	9	9.4		2	.3	.9	200	40	tr	7		93		
5/29/80	5562	8.9	36	16	5	1/8	9	10		2	.3	.9	200	40	tr	8		92		