

HAMMERHEAD TOOLS

<u>Vendor</u>	<u>Description</u>	<u>Used</u>
Smith Tool	26" BJ4658 - ReRun Bit	Run 1
Smith Tool	17 1/2" DSJ EW1413	Run 2
Dome-Hammerhead	-2 Sets Extra Cutters 26" Underreamer	UR Run-1
Smith Tool	17 1/2" DSJ EW1427	Run 3
Smith Tool	17 1/2" DSJ EW1376	Run 4
Smith Tool	17 1/2" DSJ EW1422	Run 5
Hughes Tool	12 1/4" X3A HP359	Run 6
Hughes Tool	12 1/4" J1 KX936	Run 7
Smith Tool	12 1/4" SDS EW3703	Run 8
Smith Tool	12 1/4" SDS EW3661	Run 9
Hughes Tool	12 1/4" R1 KC936	Run 10
Hughes Tool	12 1/4" MX3A HR782	Run 11
Hughes Tool	12 1/4" R2 HR072	Run 12
Hughes Tool	8 1/2" J2 JP572	Run 13

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WELL DATA SUMMARY

COMPANY Union Oil Company		CONTRACTOR Canmar Explorer II
ADDRESS P.O. Box 6247; Anchorage, AK 99502		ADDRESS
REPORT FOR J. Callender		REPORT FOR
WELL NAME & NO. Hammerhead #1, OCS Y-0849		FIELD Beaufort Sea
STATE Alaska	COUNTY North Slope	DESCRIPTION OF LOCATION BL 624, Lease Sale #87
IMCO WAREHOUSE		

WELL DATA

DATE SPUDDED	CSG. SIZE	O.D.	FROM	TO	HOLE SIZE	FROM	TO
8/7/85			-			-	
TOTAL DEPTH	CSG. SIZE	O.D.	FROM	TO	HOLE SIZE	FROM	TO
Wildcat			Tight	Hole		Tight	Hole
DATE TD REACHED	CSG. SIZE	O.D.	FROM	TO	HOLE SIZE	FROM	TO
			-			-	
TOTAL DAYS	CSG. SIZE	O.D.	FROM	TO	HOLE SIZE	FROM	TO
			-			-	

BITS: NUMBER AND SIZE

MUD UP DEPTHS

TYPE MUD

Generic Muds #2 & #6

COMMENTS

Tight Hole

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Doescher/Lundquist/Swanzy/Woodham/tl
IMCO REPRESENTATIVE

SUMMARY OF DRILLING FLUID OPERATIONS

PAGE 1 OF 4



IMCO Services
A Division of HALLIBURTON Company
2400 West Loop South, P.O. Box 22600
Houston, Texas 77027 A/C 713 871-4800

OPERATOR Union Oil Company	SECTION BL 624,	TOWNSHIP Lease Sale	RANGE #87	MUD TYPE Generic #2 & #6	CONDUCTOR	SIZE 30	DEPTH 353	BIT SIZE 36
WELL Hammerhead #1 OCS Y-0849	FIELD Beaufort Sea	SPUD DATE 8/10/85	SURFACE	20	1026	26		
CONTRACTOR Canmar II	COUNTY/PARISH North Slope	T.D. DATE 8/29/85	INTERMEDIATE	13 3/8	2884	17 1/2		
ENGINEERS Doescher/Lundquist/Swanzy/Woodham	STATE Alaska	DAYS TO T.D. 20	LINER(S)	9 5/8	8022	12 1/4		

DATE	DEPTH	MUD WT. PPG. PCF.	VIS. SEC/ QT.	MUD TEMP. F.L. SMPL Co/Fo	PV	YP	GELS		PH STRIP METER	API FLUID LOSS	HT - HP FLUID LOSS TEMP.	CAKE	ALKALINITY			SALT NaCl Cl- PPM Gr./Gal	CALCIUM PPM ION	SAND % VOL.	OIL % VOL.	WATER % VOL.	CEC	Solids %
							10 SEC	10 MIN					PI	Mf	Pm							
1985																						
8/7	-0-	Building Spud Mud					/															
8/8	-0-	10.3	300	38	38	126	81/97	8.3	9.4	-	2	.1	.3	.3	5500	260	1 1/2	0	90.5	25	9.5	
8/9	-0-	10.2	300	38	40	126	75/104	8.5	9.2	-	2	.1	.3	.3	5500	260	1	0	91	25	9	
Reduced mud temp to 31°F w/heat exchanger.																						
8/10	1059	10.2	121	48	24	63	21/34	8.2	9.0	-	2	.1	.3	.1	9000	1000	1/2	0	88	17.5	12	
Under reaming 17 1/2" hole to 26".																						
8/11	1063	10.6	64	44	22	34	8/34	8.2	9.4	-	2	.1	.3	tr	11000	1080	1/2	0	87	15	13	
8/12	1063	9.2	64	45	12	24	12/-	-	9.1	-	2	.5	1.4	.6	8000	960	1/2	0	91	22.5	9	
Mixing new vol. Pull riser to run csg.																						
8/13	1063	10.2	61	28	16	26	8/26	9.1	9.1	-	2	.2	.6	.4	9000	680	1/2	0	90	20	10	
Testing stack.																						
8/14	1063	10.2	48	39	16	12	4/17	9.1	8.0	-	2	.2	.7	.3	9000	640	1/2	0	90	20	10	
Wait on repair parts for BOP.																						
8/15	1073	10.1	55	40	13	16	18/24	12.1	15.4	-	3	.2	.4	2.0	10500	400	3/4	0	90	20	10	
Tag cmt @ 937'. Test csg. Drl float collar & cmt to 1000'. Test csg. Drl to 1073' & test formation.																						
8/16	1970	10.6	76	37	21	28	11/41	9.4	9.1	24.5	2	.1	.3	.4	8000	240	1	0	87	20	13	
Raise mud wt per Co man to 10.6. Running water to maintain vol & prehydrated Gel for vis.																						
9/17	2357	10.5+	75	40	23	22	15/45	9.0	8.5	25.0	2	.05	.3	.5	9000	420	1	0	87	20	13	
DA. Trip for bit #5. Running water & adding Barite to maintain vol. 0830. Ice Alert. Stop drlg & secure well.																						
8/18	2357	10.4+	44	52	14	9	4/20	9.0	10.0	38	2	.05	.3	.5	9000	400	1 1/2	0	87	20	13	
Wait on ice.																						
8/19	2357	10.2+	40	94	15	5	2/12	9.0	11.0	44	2	.05	.3	.5	9000	400	1 1/2	0	87	20	13	
Wait on ice.																						
8/20	2357	10.5+	49	46	21	13	8/25	9.7	9.1	30	2	.2	.6	.8	8000	400	1	0	87	20	12	
Wait on ice. Build vol.																						

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SUMMARY OF DRILLING FLUID OPERATIONS

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OPERATOR Union Oil Company	SECTION BL 624,	TOWNSHIP Lease Sale	RANGE #87	MUD TYPE Generic #2 & #6	CONDUCTOR	SIZE 30	DEPTH 353	BIT SIZE 36
WELL Hammerhead #1 OCS Y-0849	FIELD Beaufort Sea	SPUD DATE 8/10/85	SURFACE	20	1026	26		
CONTRACTOR Canmar II	COUNTY/PARISH North Slope	T.D. DATE 8/29/85	INTERMEDIATE	13 3/8	2884	17 1/2		
ENGINEERS Doescher/Lundquist/Swanzy/Woodham	STATE Alaska	DAYS TO T.D. 20	LINER(S)	9 5/8	8022	12 1/2		

DATE 1985	DEPTH	MUD WT. PPG. PCF.	VIS. SEC/ QT.	MUD TEMP. F.L. SMPL CoFo	PV	YP	GELS 10 SEC 10 MIN	PH STRIP METER	API FLUID LOSS	HT-HP FLUID LOSS TEMP.	CAKE	ALKALINITY			SALT NaCl Cl- PPM Gr./Gal	CALCIUM PPM ION	SAND % VOL.	OIL % VOL.	WATER % VOL.	CEC	% Solids
												Pt	Mt	Pm							
8/21	2357	10.5+	47	58	19	9	6/23	9.3	9.0	30	2	.2	.7	.7	7800	400	1	0	87	20	13
Wait on ice.																					
8/22	2357	10.4+	64	32	18	18	6/28	9.1	8.8	32	2	.2	.5	.3	8700	640	1	0	88	20	12
Working pipe to bot after waiting on ice.																					
8/23	2903	10.5	70	36	18	22	12/32	9.0	8.8	38	2	.1	.4	tr	11000	840	3/4	0	87	18.75	13
Drlg to TD w/no prblms other than high sand content. Running all solids equip. Reduced to 3/4%. Drispac tend to clog mud coolers.																					
8/24	2903	9.9	50	51	25	29	6/26	8.6	6.1	19	2	tr	.7	.1	10000	640	1/2	0	91	15	9
Cmtd 13 3/8". Got KCl pre flush back to surface & discharged same through dilution sys. 20:1 ratio. Mixed new vol to specs for drlg out.																					
8/25	3743	10.0	62	52	25	21	5/33	10.8	6.0	24.0	213	.1	.4	1.1	9900	640	1 1/2	0	89.5	15	10.5
Drlg cmt. Run leak off test. POH to change BHA. DA. POH for ice alert. RIH. DA.																					
8/26	5350	10.0	58	61	19	20	7/36	9.6	7.0	24	213	tr	.4	.4	9500	680	1/2	0	89.5	17.5	10.5
Some drag on connections. Increased additions of fresh Gel & continued additions of Poly RX & Drispac.																					
8/27	6300	10.3	70	69	23	24	12/41	9.0	5.8	21.6	213	tr	.4	.4	9500	640	1/2	0	88	20.0	12
No more tight spots on connections. Trip out & back in w/no prblms.																					
8/28	7200	10.6	66	65	22	23	14/44	8.6	6.0	19.9	213	.05	.5	.3	9000	800	1/2	0	86	22.5	14
POH for bit. Hole tight. Added Soltex & raised mud wt per Co. orders. DA. Short trip. DA. POH for bit.																					
8/29	8034	10.7	54	75	19	19	5/31	9.2	6.5	19.6	213	.1	.7	.5	9000	640	1/2	0	85	22.5	15
Back on bot after trip (no drag POH). DA w/no prblms. POH to log.																					
8/30	8034	10.7	78	70	24	28	18/44	8.5	6.4	18.1	213	.1	1.0	.4	9900	720	1/2	0	85	25.0	15
Logs did not go to bot. Log from stopping pt. RIH & circ & cond mud. POH to log.																					
8/31	8034	10.7	55	72	19	15	5/24	8.4	7.0	21.6	213	tr	1.0	.3	9500	600	1/2	0	85	25.0	15
Logging. No prblms.																					
9/1	8034	10.6+	66	72	20	21	8/36	8.2	7.2	20.4	213	.05	.9	.4	9500	760	1/2	0	85	22.5	15
Log w/no prblms. TIH for clean out run. Circ +2 hr. Added fresh prehydrated Gel & water to lower hi vis (+150)@ BU. POH to log.																					
9/2	8034	10.6+	66	65	19	23	9/36	8.1	8.2	16.4	213	tr	1.1	.3	10000	800	1/2	0	85	22.5	15
Finish log. TIH. Circ & Cond mud. Added prehydrated Gel & water. POH to run liner. Hole not taking mud right. TIH. Circ & cond mud.																					
9/3	8039	10.7	62	65	18	19	6/30	8.0	8.4	16.6	213	tr	1.0	.3	10000	760	1/2	0	85	22.5	15
POH. Run liner to 12' off bot. Stuck pipe. Circ mud around. Start pumping cmt. Cmt unit broke. Abort cmt job. Circ out cmt.																					

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SUMMARY OF DRILLING FLUID OPERATIONS

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IMCO Services
A Division of HALLIBURTON Company
2400 West Loop South, P.O. Box 22865
Houston, Texas 77027 AIG 713 871-4600

OPERATOR Union Oil Company	SECTION BL 624,	TOWNSHIP Lease Sale	RANGE #87	MUD TYPE Generic #2 & #6	CONDUCTOR	SIZE 30	DEPTH 353	BIT SIZE 36
WELL Hammerhead #1 OCS Y-0849	FIELD Beaufort Sea	SPUD DATE 8/10/85	SURFACE	20	1026	26		
CONTRACTOR Canmar II	COUNTY/PARISH North Slope	T.D. DATE 8/29/85	INTERMEDIATE	13 3/8	2884	17 1/2		
ENGINEERS Doescher/Lundquist/Swanzy/Woodham	STATE Alaska	DAYS TO T.D. 20	LINER(S)	9 5/8	8022	12 1/4		

DATE	DEPTH	MUD WT. PPG	VIS. SEC/ QT.	MUD TEMP. F.L.	PV	YP	GELS 10 SEC / 10 MIN	PH STRIP METER	API FLUID LOSS	HT-HP FLUID LOSS TEMP	CAKE	ALKALINITY Pf Mf Pm	SALT NaCl CaCl2 PPM Gr./Gal	CALCIUM PPM ION	SAND % VOL.	OIL % VOL.	WATER % VOL.	CEC	Solids %
1985																			
9/4	8034	10.7	40		12	8	6/18	9.4	11.0	-	2	.2 1.4 .4	10500	800	1/2	0	86	17.5	25
Set EZSV @ 5620' w/wireline. Perf 9 5/8". Set another EZSV @ 5560'. Pump cmt thru perfs to just below liner lap. Reverse out DP. POH to just above																			
liner lap & braidenhead cmt down lap. Reverse out.																			
9/5	8034	10.4	52		15	16	9/24	11.7	12.8	-	2	.6 1.1 1.0	11000	560	1/2	0	-	-	-
POH after squeeze. TIH w/12 1/2" bit & drl 80' cmt. POH. TIH w/8 1/2" bit & 9 5/8" csg. Scraper to top of 1st EZSV @ 5560'. Circ BU. Test liner top. Displ &																			
clean out csg w/seawater. Displ seawater w/9.2 ppg NaCl + 3% KCl. (Generic mud #1).																			
9/6	8034	9.2					/						94000						
POH. Run CET log. TIH w/test string.																			
9/7	8034	9.2+					/						103000						
Raise KCl from 3% to 5% per Union. TIH w/test string. Perforate one set of perfs. Run in second gun but won't pass Otis tool. Circ 3 hrs. Still won't																			
go. POH from Otis up to look at tool. Work on tool. TIH.																			
9/8	8034	9.2					/						90000						
TIH. Perforate. Start DST.																			
9/9	8034	9.2					/						94000						
Build 150 bbls. Finish DST. Reverse circ. DP back to Noralco unit. Pump 50 bbl Safe Link pill. POH.																			
9/10	8034	9.1+					/						88000						
TIH. Squeeze off testing perfs. POH. Perforate above initial EZSV & then set another EZSV @ 5200'. TIH. Squeeze off perfs. POH. TIH.																			
9/11	8034	9.2+	40		11	16	5/14						103000						
TIH. Drl 30' green cmt & top EZSV @ 5275'. Circ 2 hrs. Tag & drl hard cmt to 5390'. POH. TIH w/test string. Perforate.																			
9/12	8034	9.3+	39		9	6	/						101000						
Test.																			
9/13	8034	9.3	41		10	8	2/7						102000						
DST.																			
9/14	8034	9.3	43				/						115000						
Mix new vol.																			

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SUMMARY OF DRILLING FLUID OPERATIONS

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IMCO Services


A Division of HALLIBURTON Company
2400 West Loop South, P. O. Box 22605
Houston, Texas 77027 A/C 713 871-4800

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SUMMARY OF MUD MATERIAL USAGE - IMCO Products

PAGE 1a OF 2

			COMPANY										LOCATION										FIELD				
			Union Oil Company										BL 624, Lease Sale #87										Beaufort Sea				
			WELL										COUNTY										STATE		WAREHOUSE		
			Hammerhead #1										North Slope										Alaska		Prudhoe Bay		
DATE	DEPTH	DAILY COST	CUMULATIVE COST			Bar 20.89	Gel 21.95	Aluminum Stearate 77.80	Calcium Chloride 52.20	Lube 106 129.75	Maxpac SL (Drispac SL) 177.80	Poly RX 88.95	Safe Block 48.40	Safe Dense 35.60	Safe Link 66.61	Salt, 80# 34.74	Soda Ash 40.50	Sodium Nitrate 45.08	Soltex 130.60	XC Polymer 425.18		Engineering Services 400.00					
8/5	Wildcat	46,363.45	46,363	45																		2					
8/8	-	18,007.45	64,370	90																		2					
8/9	-	800.00	65,170	90																		2					
8/10	-	37,938.51	103,109	41			80															2					
8/11	-	24,337.54	127,446	95													2					2					
8/12	-	3,731.72	131,178	67			116										6					2					
8/13	-	23,015.26	154,193	93								15										2					
8/14	-	1,511.20	155,705	13							4											2					
8/15	-	10,516.69	166,221	82		437											5					2					
8/16	-	11,794.56	178,016	38		330						17					1					2					
8/17	-	9,436.68	187,453	06		330	28					6					2					2					
8/18	-	1,951.36	189,404	42																		1					
8/19	-	400.00	189,804	42																		1					
8/20	-	10,042.60	199,847	02		288						6					2					1					
8/21	-	800.00	200,647	02																		2					
8/22	-	12,200.41	212,847	43		462						9										2					
8/23	-	10,609.04	223,456	47		86					10	12										2					
8/24	-	16,354.65	239,811	12		369					19	14					1			7		2					
8/25	-	22,944.43	262,755	55		488	56					32						2		8		2					
8/26	-	22,450.70	285,206	25		491						37						1		8		2					
8/27	-	21,051.31	306,257	56		336					25	65										2					
8/28	-	31,539.53	337,797	09		449		1		2		6						2	150			2					
8/29	-	9,523.44	347,320	53		114						40						2	10			2					
8/30	-	5,767.60	353,088	13						1		3							35			2					
8/31	-	9,215.41	362,303	54		165					26*							24*				2					
9/1	-	800.00	363,103	54																		2					
9/2	-	800.00	363,903	54																		2					
9/3	-	800.00	364,703	54																		2					

IMCO FORM NO. 132 (Rev. 11/79)

* Inventory Correction listed on Inventory Control dated 8/31/85.

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SUMMARY OF MUD MATERIAL USAGE - UNION Products (Canmar II)

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IMCO Services
A Division of HALLIBURTON Company
2400 West Loop South, P.O. Box 22988
Houston, Texas 77271 A/C 713 871-4800

COMPANY

Union Oil Company

LOCATION

BL 624, Lease Sale #87

FIELD

Beaufort Sea

WELL

Hammerhead #1

COUNTY

North Slope

STATE

Alaska

WAREHOUSE

Prudhoe Bay

DATE	DEPTH	DAILY COST	CUMULATIVE COST	Bulk Bar 19.45	Bentonite 21.62	Technisperse 34.90	Drispac, r. 128.42	Drispac, SL 177.80	Soda Ash 40.50	Kelzan XCD 329.79	Nut Plug 15.48	Bicarbonate 41.93	Caustic Soda 35.63	KCl 12.12						
8/5																				
8/7				1631	602	10			10				2							
8/8				731	120	9			2											
8/9																				
8/10				1333			73		2											
8/11				1050	27		7							128						
8/12													4							
8/13				865	152		6													
8/14																				
8/15							3													
8/16					63		7					6	1							
8/17							4													
8/18														128						
8/19																				
8/20					136								2							
8/21																				
8/22					32		2													
8/23					91									264						
8/24							1					1	1							
8/25								23				7								
8/26					92			15												
8/27					78					4										
8/28					16			1					8							
8/29								5					14							
8/30																				
8/31					(66)**	7*						3*	9*							
9/1																				
9/2																				
9/3																				

IMCO FORM NO. 132 (Rev. 11/79)


* Inventory Correction listed on Inventory Control dated 8/31/85.

**Inventory Correction is less than listing on Inventory Control dated 8/31/85.


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SUMMARY OF MUD MATERIAL USAGE - IMCO Products

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 IMCO Services <small>A Division of HALLIBURTON Company 2400 West Loop South, P.O. Box 27000 Houston, Texas 77027 A/C 713 671-4800</small>			COMPANY Union Oil Company							LOCATION BL 624, Lease Sale #87							FIELD Beaufort Sea						
			WELL Hammerhead #1							COUNTY North Slope							STATE Alaska		WAREHOUSE Prudhoe Bay				
DATE	DEPTH	DAILY COST	CUMULATIVE COST			Bar 20.89	Gel 21.95	Aluminum Stearate 77.80	Calcium Chloride 52.20	Lube 106 129.75 Maxpac SL (Drispac SL) 177.80	Poly RX 88.95	Safe Block 48.40	Safe Dense 35.60	Safe Link 66.61	Salt, 80# 34.74	Soda Ash 40.50	Sodium Nitrate 45.08	Soltrex 130.60	XC Polymer 425.18	Engineering Services 400.00			
9/4	-	30,913.17	395,616	71																			
9/5	-	17,344.96	412,961	67				1		1					416					1			
9/6	-	7,069.36	420,031	03											170					1			
9/7	-	3,618.76	423,649	79											78					1			
9/8	-	400.00	424,049	79																1			
9/9	-	12,371.18	436,420	97						1		10	10	35	185			1		1			
9/10	-	6,052.90	442,473	87											70		2			1			
9/11	-	8,150.40	450,624	27															14	1			
9/12	-	12,473.09	463,097	36								10	10	35	244			1		1			
9/13	-	-0-	463,097	36																			
9/14	-	13,154.98	476,252	34						6					225			1					
9/15	-	5,409.24	481,661	58								10	10										
9/16	-	-0-	481,661	58																			
9/17	-	400.00	482,061	58																			
9/18	-	400.00	482,461	58																1			
9/19	-	400.00	482,861	58																1			
9/20	-	400.00	483,261	58																1			
9/21	-	-0-	483,261	58																1			
9/22	-	3,672.04	486,933	62											90					1			
9/23	-	3,038.32	489,971	94																1			
9/24	-	400.00	490,371	94																1			
TOTAL PRODUCTS (IMCO Products)					4345	280	2	0	5	90	262	30	30	70	1478	19	33	195	40	69			
IMCO Material left onboard:			5,450	70				3	70						45								

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SUMMARY OF MUD MATERIAL USAGE - UNION Products (Canmar II)																	PAGE 2b OF 2					
 IMCO Services <small>A Division of HALLBURTON Company 2400 West Loop South, P.O. Box 22906 Houston, Texas 77207 AC 713 871-4800</small>		COMPANY Union Oil Company						LOCATION BL 624, Lease Sale #87						FIELD Beaufort Sea								
		WELL Hammerhead #1						COUNTY North Slope						STATE Alaska		WAREHOUSE Prudhoe Bay						
DATE	DEPTH	DAILY COST	CUMULATIVE COST		Bulk Bar 19.45	Bentonite 21.62	Technisperse 34.90	Drispac, r. 128.42	Drispac SL 177.80	Soda Ash 40.50	Kelzan XCD 329.79	Nut Plug 15.48	Bicarbonate 41.93	Caustic Soda 35.63	KCl 12.12							
9/4					1553		4						4									
9/5														7	168							
9/6															63							
9/7															42							
9/8																						
9/9															150							
9/10						91									96							
9/11								14														
9/12																						
9/13																						
9/14								1				10			294							
9/15															377							
9/16																						
9/17																						
9/18																						
9/19																						
9/20																						
9/21																						
9/22															12							
9/23											8											
9/24																						
TOTAL PRODUCTS (UNION Products)					7163	1434	30	118	44	14	12	10	21	48	1722							

UNION OIL COMPANY

Hammerhead #1

Summary of Mud Material Usage

IMCO PRODUCTS

<u>Product</u>	<u>Sacks</u>	<u>Cost</u>	<u>Total</u>
Aluminum Stearate	2	77.80	155.60
Bar	4,345	20.89	90,767.05
Gel	280	21.95	6,146.00
Lube 106	5	129.75	648.75
Maxpac SL	90	177.80	16,002.00
Poly RX	262	88.95	23,304.90
Safe Block	30	48.40	1,452.00
Safe Dense	30	35.60	1,068.00
Safe Link	70	66.61	4,662.70
Salt, 80#	1478	34.74	51,345.72
Soda Ash	19	40.50	769.50
Sodium Nitrate	33	45.08	1,487.64
Soltex	195	130.60	25,467.00
XC Polymer	40	425.18	17,007.20
Eng. Services	69	400.00	27,600.00
Total			\$267,884.06

UNION PRODUCTS

<u>Product</u>	<u>Sacks</u>	<u>Cost</u>	<u>Total</u>
Bulk Barite	7163	19.45	139,320.35
Bentonite	1434	21.62	31,003.08
Bicarbonate	21	41.93	880.53
Caustic Soda	48	35.63	1,710.24
Drispac, r.	118	128.42	15,153.56
Drispac SL	44	177.80	7,823.20
KCl Potash	1722	12.12	20,870.64
Kelzan XCD	12	329.79	3,957.48
Nut Plug	10	15.48	154.80
Soda Ash	14	40.50	567.00
Technisperse	30	34.90	1,047.00
Total			\$222,487.88

TOTAL COST OF MATERIALS AND SERVICES

\$490,371.94

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UNION OIL COMPANY
Hammerhead #1

Breakdown of Delivery and Returns Goods Tickets

<u>Product</u>	<u>Quantity</u>	<u>Cost</u>	<u>Amount</u>
<u>Ticket No. 367400 - 07/15/85</u>			
Poly RX	80	88.95	7,116.00
Lube 106	10	129.75	1,297.50
Soda Ash	30	40.50	1,215.00
Soltex	60	130.60	7,836.00
Gelex	100	20.15	2,015.00
Aluminum Stearate	5	77.80	389.00
Sulf-X ES	134	140.10	<u>18,773.40</u>

Total Cost of Ticket No. 367400 \$38,641.90

Ticket No. 431951 - 08/13/85

Bar	2,970	20.89	62,043.30
Gel	350	21.95	7,682.50
Maxpac SL	54	177.80	9,601.20
Poly RX	160	88.95	14,232.00
XC Polymer	40	425.18	17,007.20
Sodium Nitrate	77	45.08	<u>3,471.16</u>

Total Cost of Ticket No. 431951 \$114,037.36

Ticket No. 431953 - 08/13/85

Maxpac SL	90	177.80	<u>16,002.00</u>
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Total Cost of Ticket No. 431953 \$16,002.00

Ticket No. 431952 - 08/21/85

Bar	1,375	20.89	28,723.75
Soda Ash	60	40.50	<u>2,430.00</u>

Total Cost of Ticket No. 431952 \$31,153.75



UNION OIL COMPANY
Hammerhead #1

Breakdown of Delivery and Returns Goods Tickets

<u>Product</u>	<u>Quantity</u>	<u>Cost</u>	<u>Amount</u>
<u>Ticket No. 431954 - 08/27/85</u>			
Gel	525	21.95	11,523.75
Poly RX	160	88.95	14,232.00
Maxpac SL	135	177.80	24,003.00
Soltex	150	130.60	19,590.00
KCl	280	31.77	8,895.60
Calcium Chloride	70	52.20	<u>3,654.00</u>

Total Cost of Ticket No. 431954 \$81,898.35

Ticket No. 431955 - 09/04/85

Salt, 80#	1,611	34.74	55,966.14
Safe Link	110	66.61	7,327.10
Lube 106	20	129.75	2,595.00
Defoam L	19	221.49	4,208.31
Safe Dense	65	35.60	2,314.00
Safe Block	80	48.40	<u>3,872.00</u>

Total Cost of Ticket No. 431955 \$76,282.55

Ticket No. R 104952 - 09/10/85

KCl	-280	31.77	<u>-8,895.60</u>
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Total Cost of Ticket No. R 104952 -\$8,895.60

Ticket No. R 110677 - 09/24/85

Gelex	-100	20.15	-2,015.00
Gel	-595	21.95	-13,060.25
Maxpac SL	-189	177.80	-33,604.20
Soda Ash	-71	40.50	-2,875.50
Poly RX	-138	88.95	-12,275.10
Soltex	-15	130.60	-1,959.00
Lube 106	-45	129.75	-5,838.75
Sodium Nitrate	-44	45.08	-1,983.52
Sulf-X ES	-134	140.10	-18,773.40
Safe Link	-40	66.61	-2,664.40
Safe Dense	-35	35.60	-1,246.00
Safe Block	-50	48.40	-2,420.00
Defoam L	-19	221.49	-4,208.31
Salt, 80#	-88	34.74	<u>-3,057.12</u>

Total Cost of Ticket No. R 110677 -\$105,980.55

IMCO Services

A Halliburton Company

4454 Business Park Blvd • Anchorage, Alaska 99503 • (907) 562-2255

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UNION OIL COMPANY
Hammerhead #1

Breakdown of Delivery and Returns Goods Tickets

<u>Product</u>	<u>Quantity</u>	<u>Cost</u>	<u>Amount</u>
<u>Ticket No. 432052 - 10/11/85</u>			
Lube 106	20	129.75	<u>2,595.00</u>

Total Cost of Ticket No. 432052 \$2,595.00

GRAND TOTAL \$245,734.76

COST SUMMARY

<u>Product</u>	<u>Sacks</u>	<u>Cost</u>	<u>Total</u>
Aluminum Stearate	5	77.80	389.00
Bar	4,345	20.89	90,767.05
Calcium Chloride	70	52.20	3,654.00
Defoam L	0	221.49	0.00
Gel	280	21.95	6,146.00
Gelex	0	20.15	0.00
KCl	-0	31.77	-0.00
Lube 106	5	129.75	648.75
Maxpac SL	90	177.80	16,002.00
Poly RX	262	88.95	23,304.90
Safe Block	30	48.40	1,452.00
Safe Dense	30	35.60	1,068.00
Safe Link	70	66.61	4,662.70
Salt, 80#	1,523	34.74	52,909.02
Soda Ash	19	40.50	769.50
Sodium Nitrate	33	45.08	1,487.64
Soltex	195	130.60	25,467.00
Sulf-X ES	0	140.10	0.00
XC Polymer	40	425.18	17,007.20
Total			<u>\$245,734.76</u>
Eng. Services	69	400.00	<u>27,600.00</u>
Sub Total			<u>273,334.76</u>
Air Travel	7	257.00	<u>1,799.00</u>
Material Handling Charges			<u>419.73</u>
GRAND TOTAL			<u>\$275,553.49</u>

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