

# LONGYEAR COMPANY

Contracting Division

General Office -

Minneapolis, Minnesota 55414

"DAILY DRILL REPORT"

Contract: CHINA LAKE Date: 9 26 19 83 Drill HD 500 / 3354 / 2356  
 MONTH DAY TYPE DRILL NO. TRUCK NO.  
 Location: COSO COL Foreman's Signature: [Signature]

Shift	Hole No.	Angle	Material Drilled	Bit Size & Type	Footage Summary				Feet		Total Casing in Hole	
					Drilling		Reaming		Drilled or Reamed	Core Recovered	Size	Footage
					From	To	From	To				
Day A	<u>74-2</u>	<u>90</u>										
Aft B												
Nite C												

Hourly Distribution				Supplies Consumed			
Core Drilling	Day	Aft.	Nite	Description	Size	Product Name	Number of Units
Handling Rod (change bit)				Portland			
Overburden - rock bit				Lumnite			
Collaring Hole - Dia. bit				Calseal			
Rotary Drilling				Mud	50#		
Handling Rod (bit)				Mud	100#		
Rock Bit - Overburden				Other (Describe)			
Reaming ( to )							
Casing - Placing							
- Pulling							
Delays - Client Acct.							
Cementing - Handling Rods							
- Prep Hole & Grout				Water hauling	miles	loads	
- Setting				Core boxes:	size/	no.	
- Drilling				Length of waterline:			
Moving - Hole to Hole				Lost tools: Description			
Rigging Up - Rigging Down							
Mix Mud							
Condition Hole, Lost Circulation				Lost bits: Size		Serial no.	
Surveying, Inclination Test				Depth:		ft. Hole #	
Mobilization/Demobilization				Casing lost or left in hole: Size		ft.	
Other (Explain)				for Client		Hole #	
				Longco		Hole #	
				Bit changes: Size		Serial #	Depth
				(Include			
				first bit			
				in hole)			
Total Hours							
Driller's Initials							

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	<u>R. LOVJOY</u>	<u>4</u>	<u>D. FREQUEN</u>	<u>4</u>	<u>W. SHELLMAN</u>	<u>4</u>
B			<u>W. BIRLER</u>	<u>4</u>	<u>J. JENNINS</u>	<u>4</u>
C						

Remarks: 2 hrs. Daywork.  
2 water haulers. 1/2 Shift.  
LAST REPORT FOR 74-2 WELL

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.



# LONGYEAR COMPANY

Contracting Division

General Office

Minneapolis, Minnesota 55414

"DAILY DRILL REPORT"

Contract: C/100A L2100 Date: 9 25 1953 Drill HD 5001 3384 2256  
MONTH DAY TYPE DRILL NO. TRUCK NO.

Location: Cross Lake, Minn. Foreman's Signature: Aug W Ferguson

Shift	Hole No.	Angle	Material Drilled	Bit Size & Type	Footage Summary				Feet		Total Casing in Hole	
					Drilling		Reaming		Drilled or Reamed	Core Re-covered	Size	Footage
					From	To	From	To				
Day A	<u>34-2</u>	<u>90</u>										
Aft B												
Nite C												

Hourly Distribution				Supplies Consumed			
Core Drilling	Day	Aft.	Nite	Description	Size	Product Name	Day Aft. Nite
Handling Rod (change bit)				Portland			Number of Units
Overburden - rock bit				Lumnite			
Collaring Hole - Dia. bit				Calseal			
Rotary Drilling				Mud	50#		
Handling Rod (bit)				Mud	100#		
Rock Bit - Overburden				Other (Describe)			
Reaming ( to )							
Casing - Placing							
- Pulling	(2)						
Delays - Client Acct.							
Cementing - Handling Rods							
- Prep Hole & Grout							
- Setting							
- Drilling							
Moving - Hole to Hole							
Rigging Up - Rigging Down							
Mix Mud							
Condition Hole, Lost Circulation							
Surveying, Inclination Test							
Mobilization/Demobilization							
Other (Explain)							
Putting in Test Pipe	(4)						
	2970 1 1/2 Non-incl. tubing						
Total Hours	12						
Driller's Initials	JH						

OTHER ALREADY CHANGED  
Water hauling 221 miles loads  
Core boxes: 221 size/ H. Q. no.  
Length of waterline:  
Lost tools: Description

Lost bits: Size Serial no.  
Depth: ft. Hole #  
Casing lost or left in hole: Size H W ft. 864  
for Client 864 Hole # CCC 74-2  
Longco Hole #  
Bit changes: Size Serial # Depth  
(Include first bit in hole)

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	<u>100 H &amp; H</u>	<u>12</u>	<u>W. B. B. B.</u>	<u>8</u>	<u>J. Jenkins</u>	<u>8</u>
B			<u>L. B. B.</u>	<u>8</u>	<u>P. B. B.</u>	<u>8</u>
C						

Remarks: Direct casing at 300 ft (1346)  
12 hrs. Day Work -  
Change for 864 H W Casing.

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.



# LONGYEAR COMPANY

Contracting Division

General Office -

Minneapolis, Minnesota 55414

"DAILY DRILL REPORT"

Contract: CHINA LAKE Date: 9 24 19 82 Drill 140500 / 13354 / 13356  
 Location: Coso California Foreman's Signature: [Signature]

Shift	Hole No.	Angle	Material Drilled	Bit Size & Type	Footage Summary				Feet		Total Casing in Hole	
					Drilling		Reaming		Drilled or Reamed	Core Recovered	Size	Footage
					From	To	From	To				
Day A	<u>CGC 74-2</u>	<u>90</u>										
Aft B												
Nite C	<u>CGC 74-2</u>	<u>90</u>										

Hourly Distribution				Supplies Consumed			
Core Drilling	Day	Aft.	Nite	Description	Size	Product Name	Day   Aft.   Nite
Handling Rod (change bit)				Portland			Number of Units
Overburden - rock bit				Lumnite			
Collaring Hole - Dia. bit				Calseal			
Rotary Drilling				Mud	50#		
Handling Rod (bit)				Mud	100#		
Rock Bit - Overburden				Other (Describe)			
Reaming ( to )							
Casing - Placing							
- Pulling	<u>(10)</u>		<u>(12)</u>				
Delays - Client Acct.							
Cementing - Handling Rods							
- Prep Hole & Grout							
- Setting							
- Drilling							
Moving - Hole to Hole							
Rigging Up - Rigging Down							
Mix Mud							
Condition Hole, Lost Circulation							
Surveying, Inclination Test							
Mobilization/Demobilization							
Other (Explain)							
<u>Taking out BIP</u>	<u>(2)</u>						
Total Hours	<u>12</u>		<u>12</u>				
Driller's Initials	<u>9/9J</u>		<u>RL</u>				

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	<u>K.R. Hall</u>	<u>12</u>	<u>W. Bigler</u>	<u>8</u>	<u>J. Jenkins</u>	<u>8</u>
B			<u>L. Berry</u>	<u>8</u>	<u>E. Latta</u>	<u>8</u>
C	<u>R. Longway</u>	<u>12</u>	<u>D. Ferguson</u>	<u>8</u>	<u>W. Shellman</u>	<u>8</u>

Remarks: DR. CUT Casing AT 750' WON'T COME LOSE (4/9)  
CUT Casing AT 650' & 550' RL  
24 hrs. Daywork.  
Shut 1 New Reaming C.H.

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.



# LONGYEAR COMPANY

Contracting Division

General Office -

Minneapolis, Minnesota 55414

"DAILY DRILL REPORT"

Contract: CHINA LAKE Date: 9 23 19 83 Drill HD 5001 335413356  
 Location: 6030 California Foreman's Signature: [Signature]

Shift	Hole No.	Angle	Material Drilled	Bit Size & Type	Footage Summary				Feet		Total Casing in Hole	
					Drilling		Reaming		Drilled or Reamed	Core Re-covered	Size	Footage
					From	To	From	To				
Day A	<u>666</u> <u>74-2</u>	<u>90</u>		<u>HQ 2 1/2</u>	<u>2936</u>	<u>2975</u>			<u>39</u>	<u>39</u>		
Aft B												
Nite C	<u>666</u> <u>74-2</u>	<u>90</u>		<u>HQ 2 1/2</u>	<u>2975</u>	<u>2990</u>			<u>15</u>	<u>15</u>		

Hourly Distribution				Supplies Consumed			
Core Drilling	Day	Aft.	Nite	Description	Size	Product Name	Number of Units
Handling Rod (change bit)	<u>12</u>		<u>5</u>	Portland			
Overburden - rock bit				Lumnite			
Collaring Hole - Dia. bit				Calseal			
Rotary Drilling				Mud	50#		
Handling Rod (bit)				Mud	100#		
Rock Bit - Overburden				Other (Describe)			
Reaming ( to )				<u>5.0 inch 5.0 inch</u>			
Casing - Placing				<u>5.0 inch 5.0 inch</u>			
- Pulling							
Delays - Client Acct.							
Cementing - Handling Rods							
- Prep Hole & Grout							
- Setting							
- Drilling							
Moving - Hole to Hole							
Rigging Up - Rigging Down							
Mix Mud							
Condition Hole, Lost Circulation							
Surveying, Inclination Test							
Mobilization/Demobilization							
Other (Explain)							
Total Hours	<u>12</u>		<u>12</u>				
Driller's Initials	<u>KH</u>		<u>RL</u>				

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	<u>K R Hall</u>	<u>12</u>	<u>W Bisler</u>	<u>8</u>	<u>J J Jenkins</u>	<u>8</u>
B			<u>L Baker</u>	<u>8</u>	<u>P Linder</u>	<u>8</u>
C	<u>R Linder</u>	<u>12</u>	<u>D Ferguson</u>	<u>8</u>	<u>W. Shellenbarger</u>	<u>8</u>

Remarks: 2990 total Depth.  
7 hrs Day Work.

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.



# Nova Mud Corporation

6864 So. Cottonwood No. 1  
Midvale, Utah 84047

Report No. 19

Date	9-23		19 83	Depth	2950
API WELL NO.	State	County	Well		
	CALIF	INYO	CGC 74-2		

Operator <b>CAL ENERGY</b>				Contractor <b>LONGYEAR</b>				Rig. No. <b>HD-500</b>			
Address				Address				Spud Date <b>8-5-83</b>			
Report for Mr. <b>B. PRYDE</b>				Report for Mr. <b>G. FERGUSON</b>				Section Township Range			
Well Name and No. <b>COSO CGC 74-2</b>				Field				County			
State				State				State			
Operation				Casing				Mud Volume			
Present Activity <b>Coring</b>				Size Surface Depth <b>5 1/2 300'</b>				Hole Pits			
Bit Size Make No Dep in <b>HQ</b>				Intermediate <b>4 1/2 1164</b>				Total			
Drill Pipe Size				R.P.M.				Other			
Drill Collar Size				Wt.				Mud Type <b>GEL / CMC - DISPERSED</b>			
Circulation Data				Circulation Data				Circulation Data			
Annular Vel (Ft/min.)				Annular Vel (Ft/min.)				Annular Vel (Ft/min.)			
DP				DP				DP			
DC				DC				DC			
Pressure				Pressure				Pressure			
Bottoms up				Bottoms up				Bottoms up			
Circulation				Circulation				Circulation			

Flowline Temp		Mud Properties		Suggested Treatment			
Time	2:30AM			CONTINUE SAME MIX			
Depth	2950						
Weight	8.4			1 QT SODA ASH			
Funnel Viscosity Sec./Qt.	40			2 SKS GEL			
Apparent Viscosity				10 QTS CMC			
Plastic Viscosity Cps.				1 QT CAUSTIC LIG. EVERY OTHER MIX.			
Yield Point Lb./100 Sq. Ft.							
Gel Strength Lb./100 Sq. Ft.							
PH	8						
API Fluid Loss CC/30 min.	10						
Filter Cake Thickness	2/32						
Alkalinity of Filtrate	.1			Daily Mud Costs			
Chloride PPM	1000			Product Used	Amount	Cost/Unit	Total
Calcium PPM	4						
Sand Content %	TRACE						
Solids Content %							
Oil Content %							
Formation Drilled	SOLID - HARD / FRACTURED						

	Comments
80% RETURN -	
Nova Engineer	Bob Menze
Address	
Telephone	
Warehouse Location	
Address	
Telephone	

Daily Cost \_\_\_\_\_

Previous Total \_\_\_\_\_

Total Cost \_\_\_\_\_





# Nova Mud Corporation

6864 So. Cottonwood No. 1  
Midvale, Utah 84047

Report No. 18

Date 9-22 1983 Depth 2893  
API WELL NO. CALIF INYO CGC-74-2  
State County Well

Operator CAL ENERGY Contractor LONGYEAR RIG. No. HD-500  
Address Address Spud Date 8-5-83  
Report for Mr. R. PYRDE Report for Mr. G. FERGUSON + B. AULEN Section Township Range

Well Name and No. CGC 74-2 Field County State  
Operation Casing Mud Volume Circulation Data  
Present Activity CORING Size 5 1/2 Surface 300' Depth Hole Pits Pump Size Annular Vel (Ft/min.)  
Bit Size 1 1/2 Make No Dep in 4 1/2 Intermediate 1164' Total Pump Make Model DP  
Drill Pipe Size R.P.M. Other BBI/Stroke Stroke/mix DC  
Drill Collar Size Wt. Mud Type GEL / CMC - DISPERSED BBI/Min Pressure  
Circulation

Flowline Temp	Mud Properties		Suggested Treatment
Time	7:30 AM	8:30 AM	NEW FORMULA
Depth	2893	2893	1 Qt Soda Ash
Weight	8.4	8.4	2 1/2 Sacs GEL
Funnel Viscosity Sec./Qt.	32	38	10 Qrs CMC
Apparent Viscosity			
Plastic Viscosity Cps.			
Yield Point Lb./100 Sq. Ft.			
Gel Strength Lb./100 Sq. Ft.			
PH	8	9	
API Fluid Loss CC/30 min.	20	10	
Filter Cake Thickness	7/32	7/32	
Alkalinity of Filtrate	.1	.1	
Chloride PPM	1000	1000	
Calcium PPM	4	4	
Sand Content %	Trace	0	
Solids Content %			
Oil Content %			

Formation Drilled Solid w/ FRACTURES - HARD CMC

Product Used	Amount	Cost/Unit	Total
9/16 3PM To 9/22 7AM			
Hi Yield Gel	69	5.88	405.72
CMC	2	150.00	301.00
Polycorel	1	95.00	95.00
CROSTIC LIG.	3	23.20	69.60
DRILL DETER	2	21.00	42.00
MUD SENS	1	13.80	13.80
			927.12

Comments: CHANGED FORMULA - 2<sup>ND</sup> TEST ON NEW MIXED MUD. PREPARE 80% RETURN. HOLE FOR RUN IN PIPE

Nova Engineer BOB MORGAN  
Address  
Telephone  
Warehouse Location  
Address  
Telephone

9/16 3PM To 9/22 7AM Daily Cost 927.12  
Previous Total 10115.42  
TOTAL FOOTAGE 3199.00  
Total Cost 11042.54  
MUD COST 3.45/ft



# LONGYEAR COMPANY

Contracting Division

General Office

Minneapolis, Minnesota 55414

"DAILY DRILL REPORT"

Contract: China Lake Date: 9-21 1983 Drill H D 500 / 13354 / 13356  
 Location: Coso Calif. Foreman's Signature: [Signature]

Shift	Hole No.	Angle	Material Drilled	Bit Size & Type	Footage Summary				Feet		Total Casing in Hole	
					Drilling		Reaming		Drilled or Reamed	Core Recovered	Size	Footage
					From	To	From	To				
Day A	<u>060</u> <u>74-2</u>	<u>40</u>		<u>HQWL</u>	<u>2818</u>	<u>2840</u>			<u>22</u>	<u>22</u>		
Aft B	<u>74-2</u>	<u>40</u>		<u>HQWL</u>	<u>2840</u>	<u>2870</u>			<u>30</u>	<u>30</u>		
Nite C	<u>74-2</u>	<u>40</u>		<u>HQWL</u>	<u>2870</u>	<u>2893</u>			<u>23</u>	<u>23</u>		

Hourly Distribution		Day	Aft.	Nite	Supplies Consumed			
					Description	Size	Product Name	Number of Units
Core Drilling		<u>8</u>	<u>8</u>	<u>8</u>	Portland			
Handling Rod (change bit)					Lumnite			
Overburden - rock bit					Calseal			
Collaring Hole - Dia. bit					Mud	<u>50#</u>	<u>NOVA</u>	<u>5</u>
Rotary Drilling					Mud	<u>100#</u>		<u>4</u>
Handling Rod (bit)					Other (Describe)			
Rock Bit - Overburden					<u>Mud Seal 40</u>			<u>1</u>
Reaming ( to )								
Casing - Placing								
- Pulling								
Delays - Client Acct.								
Cementing - Handling Rods								
- Prep Hole & Grout								
- Setting								
- Drilling								
Moving - Hole to Hole								
Rigging Up - Rigging Down								
Mix Mud								
Condition Hole, Lost Circulation								
Surveying, Inclination Test								
Mobilization/Demobilization								
Other (Explain)								
Total Hours		<u>8</u>	<u>8</u>	<u>8</u>				
Driller's Initials		<u>RL</u>	<u>TH</u>	<u>RL</u>				

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	<u>R. Longman</u>	<u>8</u>	<u>W. Bister</u>	<u>8</u>	<u>J. Jenkins</u>	<u>8</u>
B	<u>R. HALL</u>	<u>8</u>	<u>R. Bister</u>	<u>8</u>	<u>J. Jenkins</u>	<u>8</u>
C	<u>R. HALL</u>	<u>8</u>	<u>R. Bister</u>	<u>8</u>	<u>J. Jenkins</u>	<u>8</u>

Remarks: 3 Tons H2O Added.

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.



# LONGYEAR COMPANY

Contracting Division

General Office --

Minneapolis, Minnesota 55414

"DAILY DRILL REPORT"

Contract: China Lake Date: 9-21 1983 Drill HD 500 1 33541 3356  
 Location: Coso Calif Foreman's Signature: Doug W. Ferguson

Shift	Hole No.	Angle	Material Drilled	Bit Size & Type	Footage Summary				Feet		Total Casing in Hole	
					Drilling		Reaming		Drilled or Reamed	Core Recovered	Size	Footage
					From	To	From	To				
Day A	<u>CGC 74-2</u>	<u>90</u>		<u>HQWL</u>								
Aft B	<u>CGC 74-2</u>	<u>90</u>		<u>HQWL 2893-2907</u>					<u>14</u>	<u>14</u>		
Nite C	<u>CGC 74-2</u>	<u>90</u>		<u>HQWL 2907-2936</u>					<u>29</u>	<u>29</u>		

Hourly Distribution				Supplies Consumed			
	Day	Aft.	Nite	Description	Size	Product Name	Number of Units
Core Drilling							
Handling Rod (change bit)	<u>5</u>	<u>2</u>	<u>8</u>	Portland			
Overburden - rock bit				Lignite			
Collaring Hole - Dia. bit				Calseal			
Rotary Drilling				Mud	50#		
Handling Rod (bit)				Mud	100#		
Rock Bit - Overburden				Other (Describe)			
Reaming ( to )							
Casing -- Placing							
-- Pulling							
Delays - Client Acct.							
Cementing - Handling Rods							
- Prep Hole & Grout							
- Setting							
- Drilling							
Moving - Hole to Hole							
Rigging Up - Rigging Down							
Mix Mud							
Condition Hole, Lost Circulation							
Surveying, Inclination Test							
Mobilization/Demobilization							
Other (Explain)							
<u>Minig Heavy Mud</u>	<u>3</u>						
<u>Tong Check</u>		<u>10</u>					
Total Hours	<u>8</u>	<u>2</u>	<u>12</u>				
Driller's Initials	<u>CA</u>	<u>RL</u>	<u>RL</u>				

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	<u>C Anderson</u>	<u>8</u>	<u>JL Jenkins</u>	<u>8</u>	<u>W Bigler</u>	<u>8</u>
B	<u>KR Hall</u>	<u>8</u>	<u>L Bell</u>	<u>8</u>	<u>F Taylor</u>	<u>8</u>
C	<u>R. Lovison</u>	<u>12</u>	<u>D. Ferguson</u>	<u>8</u>	<u>W. Shelton</u>	<u>8</u>

Remarks: MAX Tong Thru @ 2893' after trip was 162.5°F  
3 Shifts. Water Hauling.  
B P Bishop

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.



# LONGYEAR COMPANY

Contracting Division

General Office -

Minneapolis, Minnesota 55414

"DAILY DRILL REPORT"

Contract: China Lake Date: 9-20 1983 Drill HD500 13354 13356  
 Location: Coso Calif Foreman's Signature: W. Bell  
 MONTH DAY TYPE DRILL NO. TRUCK NO.

Shift	Hole No.	Angle	Material Drilled	Bit Size & Type	Footage Summary				Feet		Total Casing in Hole	
					Drilling		Reaming		Drilled or Reamed	Core Recovered	Size	Footage
					From	To	From	To				
Day A	<u>CGC 74-2</u>	<u>90</u>		<u>HQDL</u>	<u>2780</u>	<u>2797</u>			<u>14</u>	<u>14</u>		
Aft B												
Nite C	<u>CGC 74-2</u>	<u>90</u>		<u>HQDL</u>	<u>2797</u>	<u>2818</u>			<u>20</u>	<u>20</u>		

Hourly Distribution		Day	Aft.	Nite	Supplies Consumed					
					Description	Size	Product Name	Day	Aft.	Nite
Core Drilling		5		9				Number of Units		
Handling Rod (change bit)		2		2	Portland					
Overburden - rock bit					Lumnite					
Collaring Hole - Dia. bit					Calseal					
Rotary Drilling					Mud	50#	NOVA	6	2	3
Handling Rod (bit)					Mud	100#				
Rock Bit - Overburden					Other (Describe)					
Reaming ( to )								1		
Casing — Placing										1
— Pulling										
Delays - Client Acct.										
Cementing - Handling Rods										
- Prep Hole & Grout										
- Setting										
- Drilling										
Moving - Hole to Hole										
Rigging Up - Rigging Down										
Mix Mud										
Condition Hole, Lost Circulation										
Surveying, Inclination Test										
Mobilization/Demobilization										
Other (Explain)										
NAVY TESTING OFFICERS										
Drilling Cave				1						
Total Hours		12		12						
Driller's Initials		RL		CH						
					OTHER					
					Water hauling	72	miles	4	loads	
					Core boxes:		size/		no.	
					Length of waterline:					
					Lost tools: Description					
					Lost bits: Size Serial no.					
					Depth: ft. Hole #					
					Casing lost or left in hole: Size ft.					
					for Client Hole #					
					Longco Hole #					
					Bit changes: Size Serial # Depth					
					(Include HQ 58531 2797					
					first bit HQ 55016 2797					
					in hole)					

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	<u>A. Longway</u>	<u>12</u>	<u>W. Butler</u>	<u>8</u>	<u>J. Longway</u>	<u>8</u>
B			<u>J. Berch</u>	<u>8</u>	<u>E. Robinson</u>	<u>8</u>
C	<u>C. Anderson</u>	<u>12</u>	<u>D. Ferguson</u>	<u>8</u>	<u>W. Stollman</u>	<u>8</u>

Remarks: Notes - 2 hrs chargeable from pull back to casing because of test delay (wa)  
8 hrs Day Work.

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.



"DAILY DRILL REPORT"

Contract: China Lake Date: 4-19 1983 Drill HD 500 13334 13336  
MONTH DAY TYPE DRILL NO. TRUCK NO.  
Location: Coso Calif. Foreman's Signature: W. Allen

[illegible]

Hourly Distribution	Day	Aft.	Nite	Supplies Consumed					
Core Drilling	12		11	Description	Size	Product Name	Day	Aft.	Nite
Handling Rod (change bit)				Number of Units					
Overburden - rock bit				Portland					
Collaring Hole - Dia. bit				Lumnite					
Rotary Drilling				Calseal					
Handling Rod (bit)				Mud	50#	NOVA	6	5	5
				Mud	100#				
Rock Bit - Overburden				Other (Describe)					
Reaming ( to )				Lignite				1	
Casing — Placing									
— Pulling									
Delays - Client Acct.									
Cementing - Handling Rods				OTHER					
- Prep Hole & Grout				Water hauling	54	miles	3	loads	
- Setting				Core boxes:		size/		no.	
- Drilling				Length of waterline:					
Moving - Hole to Hole				Lost tools: Description					
Rigging Up - Rigging Down									
Mix Mud									
Condition Hole, Lost Circulation			①	Lost bits: Size		Serial no.			
Surveying, Inclination Test				Depth:		ft. Hole #			
Mobilization/Demobilization				Casing lost or left in hole: Size		ft.			
Other (Explain)				for Client		Hole #			
				Longco		Hole #			
				Bit changes:	Size	Serial #	Depth		
				(Include					
				first bit					
				in hole)					
Total Hours	12								
Driller's Initials	RL								

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	R. Longway	12	W. Rifer	8	J. Jenkins	8
B			F. Bick	8	F. Jenkins	8
C	D. Anderson	12	D. Taylor	8	W. Shellman	8
Remarks:						

Remarks:

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.



# LONGYEAR COMPANY

Contracting Division

General Office -

Minneapolis, Minnesota 55414

"DAILY DRILL REPORT"

Contract: China Lake Date: 9-18 1983 Drill 1  
 Location: Caso Calif Foreman's Signature: W. Allen

Shift	Hole No.	Angle	Material Drilled	Bit Size & Type	Footage Summary				Feet		Total Casing in Hole	
					Drilling		Reaming		Drilled or Reamed	Core Recovered	Size	Footage
Day A	<u>CGC 74-2</u>			<u>HQWL</u>	<u>2668</u>	<u>9703</u>			<u>35</u>	<u>25</u>		
Aft B												
Nite C	<u>CGC TCH 74-2 90</u>			<u>HQWL</u>	<u>2703</u>	<u>2737</u>			<u>34</u>	<u>33.5</u>		

Hourly Distribution			Supplies Consumed		
Core Drilling	Day	Aft.	Product Name	Day	Aft.
Handling Rod (change bit)	<u>12</u>	<u>12</u>	Description		
Overburden - rock bit			Size		
Collaring Hole - Dia. bit					
Rotary Drilling					
Handling Rod (bit)					
Rock Bit - Overburden					
Reaming ( to )					
Casing - Placing					
- Pulling					
Delays - Client Acct.					
Cementing - Handling Rods					
- Prep Hole & Grout					
- Setting					
- Drilling					
Moving - Hole to Hole					
Rigging Up - Rigging Down					
Mix Mud					
Condition Hole, Lost Circulation					
Surveying, Inclination Test					
Mobilization/Demobilization					
Other (Explain)					
Total Hours	<u>12</u>	<u>12</u>			
Driller's Initials	<u>RL</u>	<u>CF</u>			

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	<u>R. Lovejoy</u>	<u>12</u>	<u>W. Bigler</u>	<u>8</u>	<u>J. Perkins</u>	<u>8</u>
B			<u>J. Bigler</u>	<u>8</u>	<u>W. Perkins</u>	<u>8</u>
C	<u>D. Anderson</u>	<u>12</u>	<u>D. Bigler</u>	<u>8</u>	<u>W. Perkins</u>	<u>8</u>

Remarks: 3 shifts H2O circulation

Barbara P. Rainey

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.



# LONGYEAR COMPANY

Contracting Division

General Office -

Minneapolis, Minnesota 55414

"DAILY DRILL REPORT"

Contract: China Lake Date: 9-17 1983 Drill 40500 13354 13356  
 Location: Coso Calif Foreman's Signature: W. Allen  
 MONTH DAY TYPE DRILL NO. TRUCK NO.

Shift	Hole No.	Angle	Material Drilled	Bit Size & Type	Footage Summary				Feet		Total Casing in Hole	
					Drilling		Reaming		Drilled or Reamed	Core Recovered	Size	Footage
					From	To	From	To				
Day A	CGC 74-2			HQWL	2598	2638			40	40		
Aft B												
Nite C	CGC 74-2	90		HQWL	2638	2668			30	30		

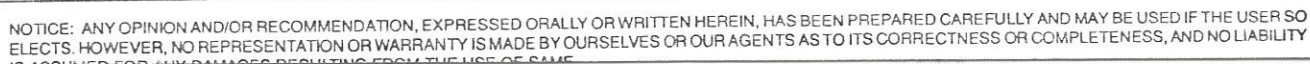
Hourly Distribution				Supplies Consumed						
	Day	Aft.	Nite	Description	Size	Product Name	Day	Aft.	Nite	
Core Drilling	12		12	Portland			Number of Units			
Handling Rod (change bit)				Lumnite						
Overburden - rock bit				Calseal						
Collaring Hole - Dia. bit				Mud	50#	NOVA	4	3	3	
Rotary Drilling				Mud	100#					
Handling Rod (bit)				Other (Describe)						
Rock Bit - Overburden				Lignite				1		
Reaming ( to )										
Casing — Placing										
— Pulling										
Delays - Client Acct.										
Cementing - Handling Rods										
- Prep Hole & Grout										
- Setting										
- Drilling										
Moving - Hole to Hole										
Rigging Up - Rigging Down										
Mix Mud										
Condition Hole, Lost Circulation										
Surveying, Inclination Test										
Mobilization/Demobilization										
Other (Explain)										

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	R. Lourey	12	W. Richter	8	J. J. Kiers	8
B			L. Berry	8	F. P. Dier	8
C	D. D. Dier	12	D. Thompson	8	W. Thompson	8

Remarks: 3 water shifts  
B. P. Bishop

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.







# LONGYEAR COMPANY

Contracting Division

General Office -

Minneapolis, Minnesota 55414

"DAILY DRILL REPORT"

Contract Chino Lake Date: 9-16 1983 Drill HD500 13354 13356  
 Location: Coso Calif. Foreman's Signature: W. Allen

Shift	Hole No.	Angle	Material Drilled	Bit Size & Type	Footage Summary				Feet		Total Casing in Hole	
					Drilling		Reaming		Drilled or Reamed	Core Recovered	Size	Footage
					From	To	From	To				
Day A	<u>CGC 74-2</u>	<u>90</u>		<u>HQWL</u>	<u>2518</u>	<u>2553</u>			<u>35</u>	<u>35</u>		
Aft B												
Nite C	<u>CGC 74-2</u>	<u>90</u>		<u>HQWL</u>	<u>2553</u>	<u>2598</u>			<u>45</u>	<u>45</u>		

Hourly Distribution				Supplies Consumed			
Core Drilling	Day	Aft.	Nite	Description	Size	Product Name	Day Aft. Nite
Handling Rod (change bit)	<u>12</u>		<u>12</u>	Portland			
Overburden - rock bit				Lumnite			
Collaring Hole - Dia. bit				Calseal			
Rotary Drilling				Mud	50#	<u>NOVA</u>	<u>4</u> <u>4</u> <u>5</u>
Handling Rod (bit)				Mud	100#		
Rock Bit - Overburden				Other (Describe)			
Reaming ( to )							
Casing - Placing							
- Pulling							
Delays - Client Acct.							
Cementing - Handling Rods							
- Prep Hole & Grout							
- Setting							
- Drilling							
Moving - Hole to Hole							
Rigging Up - Rigging Down							
Mix Mud							
Condition Hole, Lost Circulation							
Surveying, Inclination Test							
Mobilization/Demobilization							
Other (Explain)							
Total Hours	<u>12</u>		<u>12</u>				
Driller's Initials	<u>RL</u>		<u>CA</u>				

Shift	DRILLERS	Hrs.	HELPERS	Hrs.	TRUCK DRIVERS	Hrs.
A	<u>R. Longyear</u>	<u>12</u>	<u>W. Bishop</u>	<u>8</u>	<u>J. Donkers</u>	<u>8</u>
B			<u>L. Berling</u>	<u>8</u>	<u>F. Agder</u>	<u>8</u>
C	<u>O. G. Denson</u>	<u>12</u>	<u>D. Bergstrom</u>	<u>8</u>	<u>W. Skellern</u>	<u>8</u>

Remarks:

B.R. Bishop

NOTE: If item is chargeable to client, place circle around time entry. Please follow instructions on reverse side.





# Nova Mud Corporation

6864 So. Cottonwood No. 1  
Midvale, Utah 84047

Report No. 16

Date 9-16 19 83 Depth 2548  
API WELL NO. CALIF INYO CGC 74-2  
State County Well

Operator <b>CAL ENERGY</b>				Contractor <b>LONGYEAR</b>				Rig. No. <b>HD-500</b>	
Address				Address				Spud Date <b>8-5-83</b>	
Report for Mr. <b>BOB PRYDE</b>				Report for Mr. <b>G. FERGUSON-B. ALLEN</b>				Section Township Range	
Well Name and No. <b>Coso CGC 74-2</b>				Field		County		State	
Operation		Casing		Mud Volume		Circulation Data			
Present Activity <b>CORING</b>		Size <b>5 1/2</b> Surface <b>300'</b> Depth		Hole Pits		Pump Size		Annular Vel (Ft/min.)	
Bit Size <b>HQ</b>	Make	No	Dep in	Total		Pump Make Model		DP	
Drill Pipe Size		R.P.M.		Other		BBI/Stroke		Stroke/mix	
Drill Collar Size		Wt.		Mud Type		BBI/Min		Pressure	
								Bottoms up	
								Circulation	

Flowline Temp				NEW CIRCULATED MUD Mud Properties				Suggested Treatment			
Time				9AM 10AM				CHANGE MIX TO FOLLOWING TO			
Depth				2522 2522				RELIEVE HI PRESSURE			
Weight				8.6 8.6				1/2 QT SODA ASH			
Funnel Viscosity Sec./Qt.				75 58				1 1/2 BAGS GEL			
Apparent Viscosity								49 CMC			
Plastic Viscosity Cps.								20% CAUSTIC LIG.			
Yield Point Lb./100 Sq. Ft.								NO POLY COREL & ADD MUD SEAL.			
Gel Strength Lb./100 Sq. Ft.								EVERY OTHER MIX.			
PH				8 8				9/9 7AM TO 9/16 3PM			
API Fluid Loss CC/30 min.				14 10				Mud Costs			
Filter Cake Thickness				2/32 2/32				Product Used Amount Cost/Unit Total			
Alkalinity of Filtrate				.1 .1				Hi PIELD GEL 91 528 535.08			
Chloride PPM				1000 1000				CMC 2 150.00 301.00			
Calcium PPM				4 4				POLY COREL 2 95.00 190.00			
Sand Content %				TRIDE				SODA ASH 1 23.00 23.00			
Solids Content %								MUD SEAL 1 13.80 13.80			
Oil Content %								1062.88			
Formation Drilled				SOUND, HARD / FRACTURED				Ft Drill 9/9 7AM - 9/16 3PM			
Comments				80% RETURN. HAVING HI PRESSURE				448'			
				FR FACE OF BIT 300 PSI. CLAY SEAL							
				30' THICK AT 2350' APPROX.							
				TUBE STICKS FR CLAY & NO CUTTINGS COMING							
				OUT. 3PM MIX CHANGE HOLE &							
Nova Engineer				PRESSURE STABLE.				9/9 7AM TO 9/16 3PM			
Address								Daily Cost 1012.88			
Telephone								Previous Total 9052.54			
Warehouse Location								TOTAL 10115.42			
Address								Total Cost 2854'			
Telephone								#3.54/FT			

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