URBD 70208 DRILL
CONTRACT & DAILY REPORT: EKLUND, 9/90

6000863 2

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Nov. 13, 90 Tuesday Shift 7:00am-5:00pm (1)

Drill No. 616 Location Rose Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled 485'

Booster No. _____ Hours Drilled 10

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours _____

FORMATION LOG

From	To	Formation
0	485	RL-146
	485'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name
5 1/2	M4315	New	OH836	

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars Helper Schoorl

Driller D. Elordi Approved W. Wenien

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Nov. 14, 90 Wed. Shift 7:00am-5:00pm (2)

Drill No. 616 Location Rose Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled 180'

Booster No. 4 1/2 hrs. Hours Drilled 4 1/2

Aux. Comp. No. _____ Hours Equip. Rep. 4 discharge

Hours Casing swivel froze up

Hours Cementing had to rebuild

Hours Standby _____

Hours Travel _____

Hours Other 1 1/2 haul water

Total Hours 10

FORMATION LOG

From	To	Formation
485	665	RL-146
	180'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars Helper Schoorl

Driller D. Elordi Approved W. Werner

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Nov. 15, 90 Thurs. Shift 7:00am-5:00pm (3)

Drill No. 616 Location Rose Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled 505

Booster No. 3 hrs. Hours Drilled 7 1/2

Aux. Comp. No. _____ Hours Equip. Rep. 2 1/2 still working on discharge swivel

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours 10

FORMATION LOG

From	To	Formation
0	505	RL-147
	505'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage
6"	Thinwall	20'

LOST MTL

Description	No. Sacks	Size Sacks
Clear Mud	1	

REMARKS

Helper Schollars Helper Schoorl

Driller D. Elordi Approved W. Weiner

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Nov. 16, 90 Friday

Shift 7:00am-5:00pm (4)

Drill No. 616

Location Rose Bud

Hole No. _____

Footage End Shift _____

Water Used _____ Gallons

Footage Start Shift _____

Water Truck No. _____

Footage Drilled 565'

Booster No. _____

Hours Drilled 10

Aux. Comp. No. _____

Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours _____

FORMATION LOG

From	To	Formation
505	605	RL-147
0	465	RL-148
	565	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

GEOLOGIST T.D. AT 600' DRILLED 5' MORE BY MISTAKE

Helper Schollars

Helper Schoorl

Driller D. Elordi

Approved W. Weiss

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Nov. 17, 90 Sat. Shift 7:00 am - 5:00 pm (5)

Drill No. 616 Location Rose Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled (145) 50'

Booster No. 5 hrs. Hours Drilled 5 (5)

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours _____

FORMATION LOG

From	To	Formation
465	610	RL - [redacted] 166
	145'	total hammer drlg.
610	660	
	50'	total rock-bit drilling

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name
5 1/4	Tri-Cone	new	070680	Baker Hughes
	R.C.			

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars

Driller D. Clore

Helper School

Approved Wm Werner

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Nov. 18, 90 Sunday Shift 7:00Am-5:00pm (6)

Drill No. 616 Location Rose Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled 180'

Booster No. 5 hrs. Hours Drilled (10)

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours _____

FORMATION LOG

From	To	Formation
660	840	RL-~~HB~~ 166
	180'	total rock-bit drilling

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING	20'	6"	Thinwall

	Description	No. Sacks	Size Sacks
LOST MTL	Wyo-Ben Gel	1	

REMARKS Had 20' casing set. Started blowing out behind the rig. Put pipe on bottom and set 20 more casing.

Helper Schollars Helper Schoorl

Driller D. Elorda Approved W. Werner

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Nov. 19, 90 Monday

Drill No. 616

Hole No. _____

Water Used _____ Gallons

Water Truck No. _____

Booster No. _____

Aux. Comp. No. _____

Shift 7:00am-5:00pm (7)

Location Rose Bud

Footage End Shift _____

Footage Start Shift _____

Footage Drilled 260'

Hours Drilled (10)

Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours _____

FORMATION LOG

From	To	Formation
840	1100	RL-166
	260'	total rock-bit drilling

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars

Driller D. Eklund

Helper Schoorl

Approved W. Wernick

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(8)

Date Nov. 20,90 Tues. Shift 7:00am-5:00pm

Drill No. 616 Location RoseBud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled 435'

Booster No. 4 hrs. Hours Drilled 5 1/2

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel 1 1/2 haul water

Hours Other (3) trip rock-bit out

Total Hours 10 of hole RL-166

FORMATION LOG

From	To	Formation
0	435	RL-167
	435'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage
6"	Thinwall	20'

LOST MTL

Description	No. Sacks	Size Sacks
Portland Cement	3	

REMARKS

Helper Schollars Helper Schoorl

Driller D. Clouds Approved W. Weimer

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(9)

Date Nov. 21, 90 Wed. Shift 7:00am-5:00pm

Drill No. 616 Location Rose Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled (365')

Booster No. _____ hrs. Hours Drilled 10

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours _____

FORMATION LOG

From	To	Formation
435	800	RL-167
	365'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars Helper Schoorl

Driller D. Elord Approved Ken Eklund

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 11-9-90 Shift Day

Drill No. 546 Location Rosebud

Hole No. RL162, RL163 60° angle Footage End Shift 445 RL162 / 565' RL163

Water Used _____ Gallons Footage Start Shift 365' / 0

Water Truck No. _____ Footage Drilled 645'

Booster No. _____ Hours Drilled 12

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____ (12)

Hours Travel _____

Hours Other _____

Total Hours 12

FORMATION LOG

From	To	Formation
365	445	RL 162, 45° angle TD
0	565'	RL 163, 60° angle

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Robby Helper Steve Dewey

Driller Derrell Osborn Approved Deborah Mendell

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 11-10-90 Shift Day

Drill No. 546 Location Rosebud

Hole No. RL163 60°L 164 Footage End Shift RL163 / 580

Water Used 600 Gallons Footage Start Shift ~~565~~ / 0

Water Truck No. ARCO Footage Drilled 580

Booster No. Hours Drilled 9½

Aux. Comp. No. Hours Equip. Rep.

Hours Casing ~~1~~

Hours Cementing

Hours Standby

Hours Travel ½ To ~~Hole~~ Hole

Hours Other ½ To Low Boy.

Total Hours 11½

FORMATION LOG

From	To	Formation
~~1~~565	600 TD RL 163, 60° angle	
0	545	TD RL 164

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Robby Helper Steve Dewey

Driller ~~Darrell Osborn~~ JOHN Woolf Approved Debra Mcneil

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 11-1-90 Shift DAY

Drill No. 546 Location Rose Bud

Hole No. RH 153 Footage End Shift 135

Water Used 1000 Gallons Footage Start Shift 0

Water Truck No. ARCO Footage Drilled 135

Booster No. Hours Drilled 7½

Aux. Comp. No. Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel ½

Hours Other BACK FILL 3

Total Hours 11

FORMATION LOG

From	To	Formation
465	600	TD RH 153

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS	4 3/4	BH-50			BAKER

CASING	Size	Type	Footage

LOST MTL	Description	No. Sacks	Size Sacks
	BENTONITE	9	50#
	CEMENT	4	

REMARKS

Helper STEVE DONALDSON Helper ROB PETERS

Driller JOHN WELCH Approved Debra Menell

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 11-2-90 Shift DAY

Drill No. 5-16 Location RoseBud

Hole No. RH 154 45°L Footage End Shift 525

Water Used 1200 Gallons Footage Start Shift 0

Water Truck No. ARCO Footage Drilled 525

Booster No. Hours Drilled 10

Aux. Comp. No. Hours Equip. Rep.

Hours Casing 1

Hours Cementing

Hours Standby

Hours Travel

Hours Other

Total Hours 11

FORMATION LOG

From	To	Formation
0	525	RH 154 45°L

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper STEVE DONALDSON Helper ROB POTERS

Driller JOHN WELL Approved Deborah Mennell

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 11-3-90

Drill No. 5-16

Hole No. RL-154 <15°L 155 45°L

Water Used _____ Gallons

Water Truck No. _____

Booster No. _____

Aux. Comp. No. _____

Shift DAY

Location Rose Bud

Footage End Shift 4555

Footage Start Shift 0

Footage Drilled 4555

Hours Drilled 6 1/2

Hours Equip. Rep. _____

Hours Casing 1

Hours Cementing _____

Hours Standby _____

Hours Travel 1/2

Hours Other BACK FILL 3

Total Hours 11

FORMATION LOG

From	To	Formation
525	645	TD RL 154 45°L
0	335	RL 155 45°L

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper STEVE DONALDSON

Driller JOHN WELCH

Helper ROB PETERS

Approved [signature]

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 11-4-90 Shift DAY

Drill No. 546 Location Rose Bud

Hole No. RH 155 45°L RH 156 45°L Footage End Shift 455

Water Used _____ Gallons Footage Start Shift 0

Water Truck No. _____ Footage Drilled 455

Booster No. _____ Hours Drilled 5

Aux. Comp. No. _____ Hours Equip. Rep. 2

Hours Casing _____

Hours Cementing _____

Hours Standby CAT WORK 1/2

Hours Travel 1/2

Hours Other BACKFILL 3

Total Hours 11

FORMATION LOG

From	To	Formation
335	605	TD RH 155 45°L
0	285	RH 156 45°L

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

CASING	Size	Type	Footage

LOST MTL	Description	No. Sacks	Size Sacks
	BENTONITE	12	50#

REMARKS

Helper STEVE DONALDSON Helper ROB PETERS

Driller JOHN WELL Approved [signature]

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 11-5-90 Shift DAY

Drill No. 546 Location Rose Bud

Hole No. RL 156 45°L RL 157 60°L Footage End Shift 145

Water Used 500 Gallons Footage Start Shift 0

Water Truck No. ARCO Footage Drilled 145

Booster No. Hours Drilled 3½

Aux. Comp. No. Hours Equip. Rep.

Hours Casing 1

Hours Cementing 4

Hours Standby

Hours Travel 1½

Hours Other

Total Hours 10

FORMATION LOG

From	To	Formation
285	305	TD RL 156 45°L
0	25	RL 157 60°L

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage
6"	THINWALL	20'

LOST MTL

Description	No. Sacks	Size Sacks
CEMENT	11	94#

REMARKS

Helper STEVE DEWEY Helper ROB PETERS

Driller JOHN WELLS Approved

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 11-6-90 Shift DAY

Drill No. 5-16 Location Rose Bud

Hole No. RL-157 60°L Footage End Shift 380

Water Used 1200 Gallons Footage Start Shift 0

Water Truck No. ARCO Footage Drilled 380

Booster No. Hours Drilled 8-4

Aux. Comp. No. Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby HAUL H_2O 1

Hours Travel 3

Hours Other BACKFILL 2

Total Hours 10

FORMATION LOG

From	To	Formation
25	405	TD RL 157 260°L

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
Cement	4	94#
Bentonite	4	

REMARKS

Helper ROB PETERS Helper STEVE DEWEY

Driller JOHN WELCH Approved

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 11-7-90 Shift Day

Drill No. 546 Location Rose Bud

Hole No. RL 160 50% 161 45% Footage End Shift 515

Water Used 300 Gallons Footage Start Shift 0

Water Truck No. ARdCO Footage Drilled 515

Booster No. Hours Drilled 8

Aux. Comp. No. Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel 1

Hours Other HAUL H2O 1

Total Hours 10

FORMATION LOG

From	To	Formation
0	400	TD RL 160 50%
0	115	RL 161 45%

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS CASING BLEW OUT IN 160 ~~HOLE~~ COULDN'T KEEP CONTAMINATION OUT OF SAMPLE TALKED TO KEN TULLER HE SAID GO ON WITH HOLE DON'T WORRY ABOUT CONTAMINATION.

Helper Bob Peters Helper Steve Dewey

Driller John Weld Approved Dennis Kenill

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 11-8-90 Shift DAY

Drill No. 546 Location Rose Bud

Hole No. RH ~~161~~ 45°L 16R 45°L Footage End Shift 655

Water Used 400 Gallons Footage Start Shift 0

Water Truck No. ARCO Footage Drilled 655

Booster No. Hours Drilled 9 1/2

Aux. Comp. No. Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel 1/2

Hours Other

Total Hours 10

FORMATION LOG

From	To	Formation
1150	405	TD RH ~~161~~ <15°L
0	365	RH ~~162~~ <15°L

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name
13 3/4	34-15			Drillmas

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper ROB PETERS Helper Steve Dewey

Driller John Weld Approved Robert Merrill

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(1)

Date Oct. 16, 90 Tues. Shift 7:00 am - 7:00 pm

Drill No. 616 Location Rosebud

Hole No. Footage End Shift

Water Used Gallons Footage Start Shift

Water Truck No. Footage Drilled 305'

Booster No. Hours Drilled 7

Aux. Comp. No. Hours Equip. Rep.

Hours Casing 1

Hours Cementing

Hours Standby

Hours Travel

Hours Other 2 setting up rig

Total Hours 10

FORMATION LOG

From	To	Formation
0	305	RL-138
	305'	total

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

CASING	Size	Type	Footage
	6"	Thin-Wall	20'
	140 miles - hiway mob.		
	3 hrs. - off-road mob.		
	moved down on Sat.		

LOST MTL	Description	No. Sacks	Size Sacks
	Wyo-Ben	4	
	Clear-Mud	1	
	Well-Foam	1	
	SAPP	1 5gal.	

REMARKS Hit water at about 250', very broken, having problems, with hole washing in.

Helper Schollars Helper Schoorl

Driller D. Clark Approved Glen Mendl

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Oct. 17, 90 Wed. Shift 7:00am-5:00pm (7)

Drill No. 616 Location Rose Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled (235')

Booster No. 3 hrs. booster Hours Drilled 7 1/2

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel (1 1/2) haul water

Hours Other (1) trip for rock bit

Total Hours 10

FORMATION LOG

From	To	Formation
305	540	RL-138
	235'	total

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS	5 3/8	R.C.	new	105159	Baker Hughes
		R.B.			
	5 1/4"	wear-sleeve			
	2	wiping rubbers			

CASING	Size	Type	Footage

LOST MTL	Description	No. Sacks	Size Sacks
	Wyo-Ben	8	
	Clear-mud	1	

REMARKS

Helper Schollars Helper Schoorl

Driller D. Elorda Approved Edward Monick

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(3)

Date Oct. 18, 90 Thursday

Shift 7:00am - 6:00pm

Drill No. 616

Location Rose Bud

Hole No. _____

Footage End Shift _____

Water Used _____ Gallons

Footage Start Shift _____

Water Truck No. _____

Footage Drilled 260'

Booster No. _____

Hours Drilled (8)

Aux. Comp. No. _____

Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other (3) drill rock-bit to bottom mud hole

Total Hours 11

FORMATION LOG

From	To	Formation
540	800	RL-138
	260'	total rock-bit drilling

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
Wyo-Ben	8	

REMARKS

Helper Schollars

Helper Schoorl

Driller D. Clonts

Approved Delora Klemmer

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(4)

Date Oct. 19, 90 Friday

Drill No. 616

Hole No. _____

Water Used _____ Gallons

Water Truck No. _____

Booster No. _____

Aux. Comp. No. _____

Shift 7:00am-6:00pm

Location Rose Bud

Footage End Shift _____

Footage Start Shift _____

Footage Drilled 240'

Hours Drilled (8 1/2)

Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel abandoning hole

Hours Other (2 1/2) as we tripout

Total Hours 11

FORMATION LOG

From	To	Formation
800	1040	RL-138
	240'	total rock-bit drilling

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
Clear-Mud	1	
Wyo-Ben	6	
used while drilling		
Wyo-Ben	6	
used for abandonment		

REMARKS

Helper Schollars

Driller D. Elordi

Helper Schoorl

Approved Dlkm McCormick

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(1)

Date Oct. 20, 90 Sat. Shift 7:00am-6:00pm (5)

Drill No. 616 Location Rose Bud

Hole No. RL-139 Footage End Shift

Water Used Gallons Footage Start Shift

Water Truck No. Footage Drilled 305'

Booster No. Hours Drilled 5 1/2

Aux. Comp. No. Hours Equip. Rep.

Hours Casing 1 set & cement 20'

Hours Cementing

Hours Standby

Hours Travel 1 1/2 haul water

Hours Other (3) abandoning hole RL-138

Total Hours 11

FORMATION LOG

From	To	Formation
0	305	RL-139
	305'	total

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS	5 3/4	350R	new	981046	Dalby

CASING Size	Type	Footage
6"	Thinwall	20'

LOSTMTL Description	No. Sacks	Size Sacks
5	Wyo-Ben	
6	cement (Portland)	
2	Cal-Seal	
used for RL-138	hole abandonment, on	
2	Cal-Seal	
1	Wyo-Ben	
used on casing hole	RL-139	

REMARKS

Helper Schollars Helper Schoorl

Driller D. Elords Approved Delbert Eklund

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Oct. 21, 90 Sunday Shift 7:00am-5:00pm (6)

Drill No. 616 Location Rose Bud

Hole No. RL-139 Footage End Shift

Water Used Gallons Footage Start Shift

Water Truck No. Footage Drilled 420'

Booster No. 6 hrs. Hours Drilled 10

Aux. Comp. No. Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel

Hours Other

Total Hours

FORMATION LOG

From	To	Formation
305	725	RL-139
	420'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars Helper Schoorl

Driller D. Elord Approved Debra Mynatt

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(7)

Date Oct. 22, 90 Monday Shift 7:00am-6:00pm

Drill No. 616 Location Rose-Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled 100'

Booster No. 4 1/2 hrs. Hours Drilled 5 1/2

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing 1 1/2 set & cement 20'

Hours Cementing _____

Hours Standby _____

Hours Travel 4

Hours Other 3 abandoning hole

Total Hours 11 RL-139

FORMATION LOG

From	To	Formation
725'	800	RL-139
0	25	RL-140
	100'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage
6"	Thinwall	20'

LOST MTL

Description	No. Sacks	Size Sacks
Wyo-Ben	10	
Portland Cement	10	
Cal-Seal	6	
used for hole abandonment on hole # RL-~~140~~ 139		
Cal-Seal	4	
used to seal casing on RL-140		

REMARKS

Helper Schollars Helper School

Driller D. Elorde Approved Debra Mumbold

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Oct. 23,90 Tuesday

Shift 7:00am-5:00pm (8)

Drill No. 616

Location Rose Bud

Hole No. _____

Footage End Shift _____

Water Used _____ Gallons

Footage Start Shift _____

Water Truck No. _____

Footage Drilled 485'

Booster No. _____

Hours Drilled 10

Aux. Comp. No. _____

Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours _____

FORMATION LOG

From	To	Formation
25	505	RL-140
	485'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
Sapp	1	

REMARKS Trip for broken piston, at 260'

Helper Schollars

Helper School

Driller D. Elorde

Approved Debra Wemmer

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(9)

Date Oct. 24, 90 Wed. Shift 7:00am-5:00pm

Drill No. 616 Location RoseBud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled 495'

Booster No. 8 hrs. Hours Drilled 9

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other 1 haul water

Total Hours 10

FORMATION LOG

From	To	Formation
50	900	RL-140
	495'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars Helper Schoorl

Driller D. Clords Approved Delmar W. Eklund

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

#0

Date Oct. 25, 90 Thurs. Shift 7:00am-4pm

Drill No. 616 Location Rose Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled 1455

Booster No. 6 hrs. Hours Drilled _____

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours _____

FORMATION LOG

From	To	Formation
900	1050	RL 140
	1455	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars Helper School

Driller D. Elord Approved Debra Nemble

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Oct. 30, 90 Tuesday

Shift 7:00am-5:00pm (1)

Drill No. 616

Location RoseBud

Hole No. _____

Footage End Shift _____

Water Used _____ Gallons

Footage Start Shift _____

Water Truck No. _____

Footage Drilled 325

Booster No. _____

Hours Drilled 4

Aux. Comp. No. _____

Hours Equip. Rep. _____

Hours Casing 1 set 10'

Hours Cementing 1 mix, pour down hole let it set up

Hours Standby _____

Hours Travel _____

Hours Other (4) abandoning hole RL-140

Total Hours 10

FORMATION LOG

From	To	Formation
00	325'	RL-1411
	325'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name
5 1/2	1315	new	91296	Generic

CASING

Size	Type	Footage
6"	thinwall	10'

LOST MTL

Description	No. Sacks	Size Sacks
Wyo Ben Portland Cement used for abandoning hole RL-140	9 8	
Cal-Seal Portland Cement used to cement casing RL-1411	1 1	

LAC already Pd for Cmt + Bentonite

REMARKS

Helper Schollars

Helper School

Driller D. Clouse

Approved W. Wemer

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(2)

Date Oct. 31, 90 Wed. Shift 7:00am-5:00pm

Drill No. 616 Location Rose Bud

Hole No. Footage End Shift

Water Used Gallons Footage Start Shift

Water Truck No. Footage Drilled 600'

Booster No. 9 hrs. Hours Drilled 8

Aux. Comp. No. Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel

Hours Other 2 haul water

Total Hours 10

FORMATION LOG

From	To	Formation
325	925	RL-141
	600'	total

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	SAPP	1	

REMARKS

Helper Schollars Helper School

Driller D. Elordi Approved William R. Weiner

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(3)

Date Nov. 1, 90 Thursday Shift 7:00am-6:00pm

Drill No. 616 Location Rose Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled 255'

Booster No. 7 hrs. Hours Drilled 10

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing 1

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours 11

FORMATION LOG

From	To	Formation
925	1155	RL-141
0	25	RL-142
	255'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage
6"	Thinwall	20'

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars Helper Schoorl

Driller D. Elordi Approved William E. Wehrli

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(4)

Date Nov. 2, 90 Friday

Drill No. 616

Hole No.

Water Used ____ Gallons

Water Truck No.

Booster No. 6 hrs.

Aux. Comp. No.

Shift 7:00 am - 5:00 pm

Location Rose Bud

Footage End Shift

Footage Start Shift

Footage Drilled 660'

Hours Drilled 8 1/2

Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel

Hours Other 1 1/2 haul water

Total Hours 10

FORMATION LOG

From	To	Formation
25	685 660'	RL-142 total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
SAPP	1	

REMARKS

Helper Schollars

Driller D Elord

Helper Schoorl

Approved [signature]

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(5)

Date Nov. 3, 90 Saturday

Shift 7:00am-5:00pm

Drill No. 6/6

Location Rose Bud

Hole No.

Footage End Shift

Water Used
Gallons

Footage Start Shift

Water Truck No.

Footage Drilled 110'

Booster No. 4 1/2 hrs.

Hours Drilled 4 1/2

Aux. Comp. No.

Hours Equip. Rep. 5 1/2 blew hose

Hours Casing on booster

Hours Cementing

Hours Standby

Hours Travel

Hours Other

Total Hours 10

FORMATION LOG

From	To	Formation
685	795	RL-142
	110'	total

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL			

REMARKS

Helper Schollars

Helper Schoor l

Driller D. Elordi

Approved William F. Weiman

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Nov. 4, 90 Sunday

Shift 7:00am-6:00pm (6)

Drill No. 616

Location Rose Bud

Hole No. _____

Footage End Shift _____

Water Used _____ Gallons

Footage Start Shift _____

Water Truck No. _____

Footage Drilled (395')

Booster No. 3 hrs.

Hours Drilled 9 1/2

Aux. Comp. No. _____

Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other 1 1/2 haul water

Total Hours 11

FORMATION LOG

From	To	Formation
795	845	RL-142
0	345	RL-143
	395'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars

Helper School

Driller D. Clark

Approved William F. Wenner

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(7)

Date Nov. 5, 90 Monday

Shift 7:00am-6:00pm

Drill No. 616

Location Rose Bud

Hole No.

Footage End Shift

Water Used
Gallons

Footage Start Shift

Water Truck No.

Footage Drilled 660'

Booster No. 10 hrs.

Hours Drilled 11

Aux. Comp. No.

Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel

Hours Other

Total Hours

FORMATION LOG

From	To	Formation
345	1,005	RL-143
	660'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
SAPP	1	

REMARKS

Helper Schollars

Helper Schoorl

Driller D. Elood

Approved W. Wenin

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Nov. 6, 90 Tuesday Shift 7:00am-5:00pm (8)

Drill No. 616 Location Rose Bud

Hole No. _____ Footage End Shift _____

Water Used _____ Gallons Footage Start Shift _____

Water Truck No. _____ Footage Drilled 445'

Booster No. _____ Hours Drilled 8 1/2

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing 1 1/2

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours 10

FORMATION LOG

From	To	Formation
0	445'	RL-144
	445'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage
6"	Thinwall	30'

LOST MTL

Description	No. Sacks	Size Sacks
Cal-Seal	1	

REMARKS

Helper Schollars Helper Schoorl

Driller D. Clodd Approved W. Weiman

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

(9)

Date Nov. 7, 90 Wed. Shift 7:00 am - 5:00 pm

Drill No. 616 Location Rose Bud

Hole No. Footage End Shift

Water Used Gallons Footage Start Shift

Water Truck No. Footage Drilled 320'

Booster No. Hours Drilled ~ 7½

Aux. Comp. No. Hours Equip. Rep.

Hours Casing 1

Hours Cementing

Hours Standby

Hours Travel

Hours Other 1½ haul water

Total Hours 10

FORMATION LOG

From	To	Formation
445	600	RL-144
0	165	RL-145
	320	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage
6"	Thinwall	@ 20'

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schoorl Helper

Driller Schollers Approved W. Wenden

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date Nov. 8, 90 Thursday

Shift 7:00am-5:00pm (10)

Drill No. 616

Location Rose Bud

Hole No. _____

Footage End Shift _____

Water Used _____ Gallons

Footage Start Shift _____

Water Truck No. _____

Footage Drilled 535'

Booster No. 10 hrs.

Hours Drilled 10

Aux. Comp. No. _____

Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours _____

FORMATION LOG

From	To	Formation
165	700	RL-145
	535'	total

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Schollars

Helper School

Driller D. Clark

Approved W. Warner

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 10-18-90 Shift Day

Drill No. 546' Location Rosebud

Hole No. RL148 45° ons Footage End Shift 435' RL148

Water Used _____ Gallons Footage Start Shift 0

Water Truck No. _____ Footage Drilled 435'

Booster No. _____ Hours Drilled 10

Aux. Comp. No. _____ Hours Equip. Rep. 1/2

Hours Casing _____

Hours Cementing _____ 435'

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours 10 1/2

FORMATION LOG

From	To	Formation
0	435'	RL148

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name
4 3/4	Hammer		[illegible]	
			06426	Drillmaster

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

0

Helper Steve Donaldson Helper Steve Dewey

Driller Derrell Osborn Approved KAT

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 10-19-20 Shift Day

Drill No. 546 Location Rosebud

Hole No. RL 14B, RL 149 60° angle Footage End Shift 645' RL 14B / 215' RL 149

Water Used _____ Gallons Footage Start Shift 435 / 0

Water Truck No. _____ Footage Drilled 425'

Booster No. _____ Hours Drilled 12

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____ (425')

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours 12

FORMATION LOG

From	To	Formation
435	645'	RL 14B TD
0	215'	RL 149

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

CASING	Size	Type	Footage

LOST MTL	Description	No. Sacks	Size Sacks

REMARKS

Helper Steve Donaldson Helper Steve Dewey

Driller Derrell Osborn Approved KAA

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 10-20-90 Shift Day

Drill No. 546 Location Rosebud

Hole No. RL 149 Footage End Shift 545' RL 149

Water Used _____ Gallons Footage Start Shift 215'

Water Truck No. _____ Footage Drilled 330'

Booster No. _____ Hours Drilled 8

Aux. Comp. No. _____ Hours Equip. Rep. 4 hrs

Hours Casing _____

Hours Cementing 2 1/2 mud hole

Hours Standby _____

Hours Travel _____

Hours Other 1 1/2 water run

Total Hours 12

330'

FORMATION LOG

From	To	Formation
215'	545'	RL 149 TD 60° angle

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Steve Donaldson Helper Steve Dewey

Driller Derrel Osborn Approved

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 10-21-90 Shift Day

Drill No. 546 Location Rosebud

Hole No. RL 150 60° angle Footage End Shift 555' RL 150

Water Used _____ Gallons Footage Start Shift 0

Water Truck No. _____ Footage Drilled 555'

Booster No. _____ Hours Drilled 12

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____ (555')

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours 12

FORMATION LOG

From	To	Formation
0	555'	RL 150

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Dan Steve Donaldson Helper Steve Dewey

Driller Dessell Osborn Approved RWS

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 10-22-90 | Shift Day

Drill No. 546 | Location Rosebud

Hole No. RL150, RL151 | Footage End Shift 700' RL150 / 20' RL151

Water Used _____ Gallons | Footage Start Shift 555' / 0

Water Truck No. _____ | Footage Drilled 165'

Booster No. _____ | Hours Drilled 8

Aux. Comp. No. _____ | Hours Equip. Rep. _____

Hours Casing 165' | Hours Cementing 4 hrs

Hours Standby _____ | Hours Travel _____

Hours Other 4 hrs mud hole and move | Total Hours 12

FORMATION LOG

From	To	Formation
555'	700'	RL 150 TD
0	20'	RL 151 60° angle

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage
6"		
20' of 6" casing left in hole RL150		

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Robby | Helper Steve Dewey

Driller Darrell Osborn | Approved Kurt

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 10-23-90 Shift Day

Drill No. 546 Location Rosebud

Hole No. RL151 Footage End Shift 500' RL154

Water Used _____ Gallons Footage Start Shift 20

Water Truck No. _____ Footage Drilled 480'

Booster No. _____ Hours Drilled 12

Aux. Comp. No. _____ Hours Equip. Rep. _____

480'

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours 12

FORMATION LOG

From	To	Formation
20'	500'	RL151TD

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL			

REMARKS

Helper Robby Helper Steve Dewey

Driller Derrell Osborn Approved

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 10-24-90 Shift Day

Drill No. 546 Location Roobud

Hole No. _____ Footage End Shift _____

Water Used _____ Footage Start Shift _____
Gallons

Water Truck No. _____ Footage Drilled _____

Booster No. _____ Hours Drilled _____

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing 4 1/2 hrs

Hours Standby _____

Hours Travel _____

Hours Other 4 1/2 hrs mudhole cp2 move

Total Hours _____

FORMATION LOG

From	To	Formation

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Robby Helper Steve Dewey

Driller Darrell Osborn Approved

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

Date 10-25-90 Shift Day

Drill No. ~~B~~ 546 Location Rosebud

Hole No. RL 152 Footage End Shift 405' RL152

Water Used _____ Gallons Footage Start Shift 0

Water Truck No. _____ Footage Drilled 405'

Booster No. _____ Hours Drilled 10

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____ (405')

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours 10

FORMATION LOG

From	To	Formation
0	405'	RL 152 45° angle

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name
4 3/4	Hammer		C2280	Mission
11	11		06041	Drillmaster

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Robby Helper Steve Dewey

Driller Darrell Osborn Approved

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept. 12, 1990 Shift Day

Drill No. 586 Location Rosebud (CHANCE)

Hole No. RL-113 Footage End Shift 210

Water Used 0 Gallons Footage Start Shift 0

Water Truck No. Ag Chem Footage Drilled 210

Booster No. — Hours Drilled 5

Aux. Comp. No. — Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel

Hours Other

Total Hours 5

FORMATION LOG

From	To	Formation
0	210	RL-113 X45°

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name
4 3/4	Drill master		OG437	

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Bagley Helper Goff

Driller Sherburn Approved Dennis Merrill

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept. 13, 1990 Shift DAY

Drill No. 586 Location Rose bld (chance)

Hole No. RL-113 Footage End Shift 520

Water Used 2000 Gallons Footage Start Shift 210

Water Truck No. Ag chem + 1604 Footage Drilled 310

Booster No. — Hours Drilled 11

Aux. Comp. No. — Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel

Hours ~~Other~~ Rock Bit 5

Total Hours 11

FORMATION LOG

From	To	Formation
210	520	with Hammer
520	570	with Rock bit

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS	4 3/4	Baker Hughs BH50	eR	089047	

CASING	Size	Type	Footage

LOST MTL	Description	No. Sacks	Size Sacks
	1 Bag gel		
	1 clear mud		

REMARKS Trip out At 520' put on Rock bit

Helper Malmberg Helper Barnes

Driller Sheeburn Approved Debra McMillen

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC.

Date Sept. 18, 1990 Shift DAY

Drill No. 580 Location Rosebud (CHANCE)

Hole No. RL-113 Footage End Shift 710

Water Used 1500 Gallons Footage Start Shift 570

Water Truck No. Ag Chem Footage Drilled 140

Booster No. — Hours Drilled 11

Aux. Comp. No. — Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel

Hours Other Rock bit

Total Hours (11)

FORMATION LOG

From	To	Formation
570	710	RL-113 X45°

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
1 GS 550		
2 Bentonite		

REMARKS

Helper ~~BARLES~~ Goff Helper KNAAR

Driller Shuebuen Approved T. Dickinson Merrill

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept. 19, 1990 Shift DAY

Drill No. 586 Location Rose bud (chance)

Hole No. RL-113 Footage End Shift 800 210

Water Used 1500 Footage Start Shift 710 0

Water Truck No. Ag Chem (Gallons) Footage Drilled 300 (210)

Booster No. — Hours Drilled 12

Aux. Comp. No. — Hours Equip. Rep. —

Hours Casing —

Hours Cementing —

Hours Standby —

Hours Travel —

Hours ~~Other~~ Rock bit (6 1/2) Abandonment (1 1/2)

Total Hours 12

FORMATION LOG

From	To	Formation
710	800	TD RL-113 ∠45°
		Rock bit
0	210	RL-114 ∠45°
		Hammer

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL			

REMARKS ABANDON RL-113 (6 Bags gel, 6 cement, 4 CAL seal)

Helper Goff Helper Knare

Driller Sheeburn Approved Debra Meniel

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept. 20, 1990 Shift DAY

Drill No. 586 Location Rosebud (CHANCE)

Hole No. RL-114 Footage End Shift 650

Water Used _____ Gallons Footage Start Shift 210

Water Truck No. Ag Chem, 164 Footage Drilled 440

Booster No. — Hours Drilled 11

Aux. Comp. No. — Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other _____

Total Hours 11

FORMATION LOG

From	To	Formation
210	650	RL-114 ∠45°

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Goff Helper _____

Driller Sherburn Approved [signature]

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept. 21, 1990

Drill No. 586

Hole No. RL-114

Water Used 1700 Gallons

Water Truck No. Ag Chem

Booster No.

Aux. Comp. No.

Shift DAY

Location Rosebud (Chance)

Footage End Shift 800

Footage Start Shift 650

Footage Drilled 150

Hours Drilled 12

Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel

Hours ~~Other~~ Abandonment 1½

Total Hours 12

FORMATION LOG

From	To	Formation
650	800	TD RL114 X45°

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	7 gel 7 cement 3 CaCl seal		

REMARKS Reenter 114 Deepen to 800' Abandon Hole

Helper Eklund

Driller Sheeburn

Helper

Approved Robert Kinnell

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept. 22 1990 Shift DAY

Drill No. 586 Location Rosebud (CHANCE)

Hole No. RL-115 Footage End Shift 555

Water Used 2000 Gallons Footage Start Shift 0

Water Truck No. Ag Chem Footage Drilled 555

Booster No. Hours Drilled 12

Aux. Comp. No. Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel

Hours Other

Total Hours 12

FORMATION LOG

From	To	Formation
0	555	RL-115 @ 60°

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
3 gel		
1 Cement		
1 CaSeal		

REMARKS

Helper Eklund Helper Shepard

Driller Sherbuck Approved Richard Titsworth

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept. 23, 1990 Shift DAY

Drill No. 586 Location Rosebud (CHANCE)

Hole No. RL-115, 116 Footage End Shift 715 355

Water Used _____ Gallons Footage Start Shift 555 0

Water Truck No. _____ Footage Drilled 515

Booster No. _____ Hours Drilled _____

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing _____

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours ~~Other~~ Abandonment + 1½

Total Hours 12

FORMATION LOG

From	To	Formation
555	715	TD RL-115 ∠60°
		ABANDON HOLE
0	355	RL-116 ∠60°

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	4 SACKS gel		
	6 cement		
	4 CALseal		

REMARKS

Helper Eklund Helper Shepard

Driller Shreeve Approved Delmar Mitchell

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept. 24 1990 Shift DAY

Drill No. 586 Location Rosebud (CHANCE)

Hole No. RL-116 Footage End Shift 490

Water Used 1300 Gallons Footage Start Shift 355

Water Truck No. Ag Chem-164 Footage Drilled 135 (90) Hammer

Booster No. — Hours Drilled

Aux. Comp. No. — Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel

Hours Other Rock Bit (4)

Total Hours 11

FORMATION LOG

From	To	Formation
~~4'~~		
~~355~~	~~445~~	
355	445	with Hammer
445	490	Rock bit RL-116 260°

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name
4 3/4	Baker Hughs		103582	
	BH50RC			

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
3 Bentonite		
3 Bentonite		

REMARKS WAited for reverse 4½ sub Finally Reamed 4¾ down hole

Helper Shepard Helper ~~Steve~~ Eklund

Driller Sheburn Approved Debra Mayfield

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept. 25, 1990 Shift DAY

Drill No. 586 Location Rose bud (CHANCE)

Hole No. RL-116, 117 Footage End Shift 510 (445)

Water Used 1400 Gallons Footage Start Shift 495 0

Water Truck No. 94 Chem - Footage Drilled 465

Booster No. _____ Hours Drilled 12

Aux. Comp. No. _____ Hours Equip. Rep. _____

Hours Casing 1

Hours Cementing _____

Hours Standby _____

Hours Travel _____

Hours Other Rockbit And Abandonment 3

Total Hours 12

FORMATION LOG

From	To	Formation
490	510	TD RL-116 @ 60' Rock Bit
0	445	RL-117 @ 60 Hammer
		cement 20' CASING

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
5 gel		
5 cement		
4 CAlseal		
20' 6" CASING		

REMARKS

Helper Storley Helper Skipped

Driller Sherburn Approved D. Eklund Jeffcoat

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept. 26, 1990 Shift DAY

Drill No. 586 Location Rosebud (CHANCE)

Hole No. RL-117 Footage End Shift 535 600

Water Used 900 Gallons Footage Start Shift 445 535

Water Truck No. Ag Chem, 16H Footage Drilled (90) HAMMER 65 Rock bit

Booster No. — Hours Drilled

Aux. Comp. No. Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours ~~Travel~~ 2 HAULING WATER

Hours ~~Other~~ Rock bit 6½ +ABANDON

Total Hours 13

FORMATION LOG

From	To	Formation
445	535	with HAMMER
535	600	TD RL-117 &
		with Rock bit

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	5 SACK gel		

REMARKS Pumped mud Down 117 no cement at LAC's Request. possible reentry

Helper Croff Helper

Driller Sherburn Approved Deborah Mfenwick

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Oct. 2, 1990 Shift DAY

Drill No. 586 Location Rosebud (wild rose)

Hole No. RL-118 Footage End Shift 640 250

Water Used 2200 Gallons Footage Start Shift 570 0

Water Truck No. Ag Chem, 164 Footage Drilled 320

Booster No. ~~—~~

Aux. Comp. No. ~~—~~

Hours Drilled

Hours Equip. Rep.

Hours Casing (1) Set 20' CASING

Hours Cementing

Hours Standby

Hours Travel

Hours ~~Other~~ (1) hr ABANDONMENT

Total Hours 12½

FORMATION LOG

From	To	Formation
570	640	TD RL-118 ∠45°
0	250	RL-119 ∠45°

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks
~~Gel~~		
4 gel		
5 cement		
2 CAlseal		

REMARKS

Helper Goff Helper Sheppard

Driller Skeebuen Approved Delmar Merrill

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Sept 27, 1990 Shift Day

Drill No. 586 Location Rosebud Wildrose

Hole No. RL-118 ∠45° Footage End Shift 570

Water Used 100 Gallons Footage Start Shift 0

Water Truck No. Ag Chem 164 Footage Drilled 570

Booster No. — Hours Drilled

Aux. Comp. No. — Hours Equip. Rep.

Hours Casing

Hours Cementing

Hours Standby

Hours Travel (1) 1½ hrs between holes

Hours Other

Total Hours 11

FORMATION LOG

From	To	Formation
0	570	RL-118 ∠45°

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS

Helper Goff Helper Shepard

Driller Skerbeck Approved Richard McNeill

Eklund Drilling Co., Inc.

P.O. Box 2786

Elko, Nevada 89801

LAC

Date Oct. 3, 1990 Shift DAY

Drill No. 586 Location Rosebud (wild rose)

Hole No. RL-119 Footage End Shift 500 255

Water Used 700 Footage Start Shift 250 0

Water Truck No. Ag Chem, 164 (Gallons) Footage Drilled 505

Booster No. — Hours Drilled

Aux. Comp. No. — Hours Equip. Rep.

Hours Casing 1 CASING

Hours Cementing

Hours Standby

Hours Travel

Hours Other ABANDONMENT 1

Total Hours 12

FORMATION LOG

From	To	Formation
250	500	TD RL-119 ∠45°
0	255	RL-120 ∠60°

MATERIALS USED

BITS

Size	Type	Footage	Serial No.	Name

CASING

Size	Type	Footage

LOST MTL

Description	No. Sacks	Size Sacks

REMARKS ABANDON 120

Helper Goff Helper Shepard

Driller Sheeburn Approved Debra Merrill

EKLUND
DRILLING COMPANY INC.
LANCE J. EKLUND - Owner

A G R E E M E N T

THIS Agreement made this twenty sixth day of September, 1990, by and between **EKLUND DRILLING COMPANY, INC.**, P. O. Box 2786, Elko, Nevada, 89801, (hereinafter called **"EKLUND"**) and **LAC MINERALS**, P. O. Box 21390, Reno, Nevada, 89515, (hereinafter called **"LAC"**).

W I T N E S S E T H

EKLUND and **LAC**, for the consideration hereinafter named, agree as follows:

Rose Bud Project in the Sulphur area near Winnemucca, Nevada.

FOOTAGE RATE: RD-10A Truck Rig - Reverse Circulation - Vertical and Angle Holes

VERTICAL HOLES:

0 -	500	Feet @	$7.00 per foot
501 -	800	Feet @	$7.75 per foot
801 -	1000	Feet @	$8.50 per foot
1001 -	1200	Feet @	$9.75 per foot
1201 +		Feet @	$220.00 per hour

ANGLE HOLES:

0 -	500	Feet @	$7.50 per foot
501 -	800	Feet @	$8.25 per foot
801 -	1000	Feet @	$9.25 per foot
1001 -	1200	Feet @	$10.50 per foot
1201 +		Feet @	$220.00 per hour

The footage rate includes bits and drilling additives except while tricone drilling, which will be at $220.00 per hour plus bits and drilling additives at cost plus 15% handling.

Standby, at **LAC**'s request or for **LAC**'s convenience, will be at $160.00 per hour.

There will be a per diem charge of $35.00 per work day per man for each work day the men are required to be away from their homes.

There will be no charge for actual moving time between sites during the first 1 1/2 hours. Thereafter, actual moving time between holes will be at the standby rate of $160.00 per hour.

605 UNION PACIFIC WAY - P.O. BOX 2786 , ELKO, NV 89801 - (702)738-1980, FAX (702)753-9229

EKLUND will bear the cost of lost tools except when, in the opinion of the driller, the hole conditions are extremely dangerous. If the driller notifies your representative of the danger of losing the drilling tools should the hole be continued, and your representative directs the driller to continue, then the drill pipe and tools lost or damaged in the hole will be billed to you at replacement cost.

In the event of lost circulation or hole conditioning, **EKLUND** will attempt to recover circulation for the first 3 hours at **EKLUND**'s expense. If circulation is not recovered and you desire to continue the hole, then an hourly rate of $220.00 per hour plus materials used will be charged until the hole condition is corrected or the hole abandoned.

Abandonment Costs: If required, costs for abandoning holes per state regulations will be borne by **LAC**, including abandonment materials and the hourly rate of $220.00 per hour will be charged while mixing abandonment mud and back filling hole with abandonment mud to surface.

Setting in excess of 20' surface casing will be charged at the standby rate of $160.00 per hour.

A booster air compressor is available at no charge if used while hammer drilling, if it becomes necessary to utilize the booster while drilling at the hourly rate, then a charge of $30.00 per hour used would apply.

Payment is due within thirty days of receipt of **EKLUND**'s invoice.

EKLUND shall conduct all its operations and performance of the Project hereunder in such a manner as will result in the greatest degree of efficiency consistent with good engineering and mining practice, and shall employ modern work methods and equipment and skilled and experienced crews.

All of **EKLUND**'s operations on or about the Project Sites shall be conducted in a careful, safe and workmanlike manner, in accordance with customary engineering and mining standards and procedures, and **EKLUND** shall maintain the project Sites in a clean, safe and orderly condition.

EKLUND agrees to indemnify and save harmless **LAC**, its officers, agents and employees, against any and all liability, loss or damage of every kind and nature, including attorney's fees, arising from any act by, omission of or negligence of **EKLUND** or its subcontractors or the officers, agents or employees of either, while engaged in the performance of this Drilling Agreement or while on or about the Properties, or arising from any debt, expense or claim incurred by **EKLUND** or its subcontractors or the officers, agents or employees of either.

INSURANCE. **EKLUND** will obtain and continue in force, during the term of this Agreement, at is own expense and at a minimum, all insurance specified below. **EKLUND** will not commence work nor allow any subcontractor to commence work until all insurance has been approved and accepted by **LAC.**

The insurance to be obtained and continued in force by **EKLUND** is the following:

(1) Workmen's Compensation and Occupational Disease Disability insurance as required by the laws of the state in which the Project is to be performed.

(2) Employer's Liability insurance in the amount of $1,000,000.

(3) Comprehensive Automobile Liability insurance covering owned, non-owned and hired vehicles with Bodily Injury limits of $1,000,000 each accident and Property Damage with a limit of $500,000 each accident.

(4) Comprehensive General Liability insurance including broad contractual liability with Bodily Injury limits of $1,000,000 each occurrence and Property Damage limits of $500,000 each occurrence.

Upon request, all such insurance shall name **LAC** as an additional insured. Certificates of insurance shall be furnished to **LAC** upon request and shall include the following statement:

(1) At least ten (10) days prior to the effective date of any material change or cancellation, written notice thereof will be sent by registered mail to **LAC** at its address first set forth above.

THIS Agreement constitutes the entire Agreement between the parties and, except as may be specifically set forth herein, no changes can be made herein except by an agreement in writing, duly authorized by the parties or their duly authorized agents.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

EKLUND DRILLING COMPANY, INC.

BY Lance J. Eklund
Lance J. Eklund, President

LAC MINERALS

BY Nathan L. Brewer
9/28/90