

Umiat Well Pluggings – 2004

Operations Summary

BLM initiated well plugging operations in the Umiat area on April 21, 2004 under contract to Olgoonik Environmental Services (OES). The following legacy wells were plugged before the cessation of operations on May 11, 2004:

- **Umiat #8**
- **Umiat #10**
- **Umiat #4**
- **Umiat #3**

Plugging operations were conducted to stop a leaking gas well (**Umiat #8**) and to plug other wells in the Umiat area that were abandoned following the U.S. Navy’s exploration efforts in the late 1940’s and 50’s. At the completion of operations, the well heads were preserved due to their potential historical significance. The wells are located near Umiat, a former Navy site constructed in the 1940’s as a base of operations supporting oil exploration within the formerly named Naval Petroleum Reserve – 4. Umiat is located on the banks of the Colville River approximately 100 miles southwest of Prudhoe Bay.

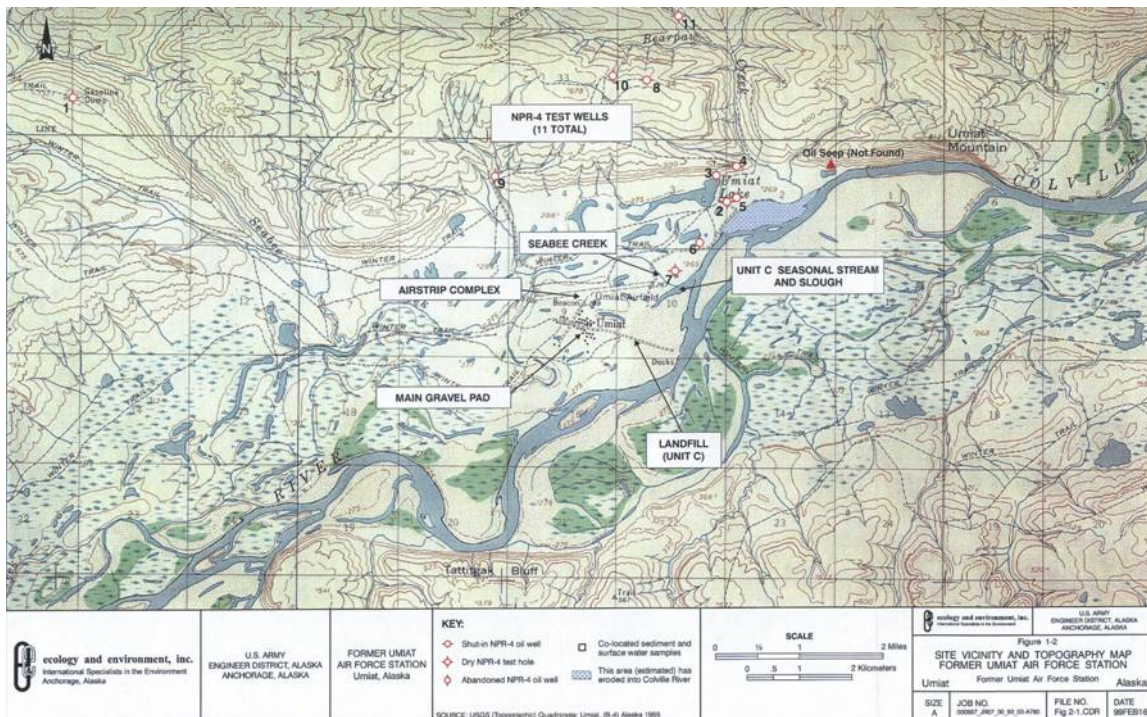


Figure 1 – Map of Umiat and well locations



Figure 2 – Umiat #8 and #10 wellheads during the summer of 2003.



Figure 3 – Umiat #4 and #3 wellheads during the summer of 2003.



Figure 4 – Umiat Camp April 25, 2004



Figure 5 – Offloading equipment at Umiat runway



Figure 6 – Operations at Umiat #8 (Well is inside wooden enclosure)



Figure 7 – Umiat #8 wellhead inside wooden enclosure



Figure 8 – Operations at Umiat #10



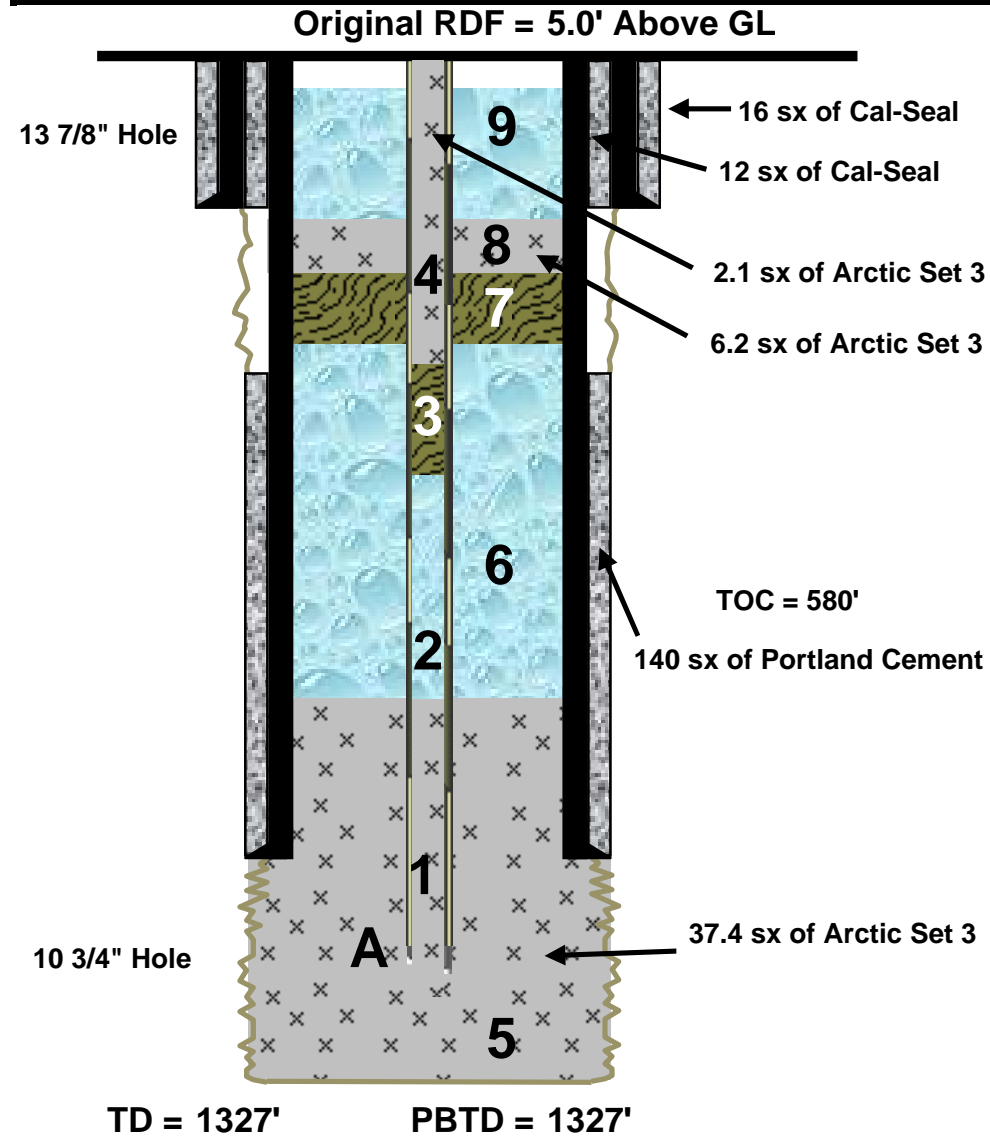
Figure 9 – Operations at Umiat #4



Figure 10 – Operations at Umiat #3



Umiat #8	Rig:	Cardwell Unitized Spudder Model K			
	Spud:	May 2, 1951			
Umiat	Meridian	Township	Range	Section	Start P+A
	Umiat	1N	1W	34	4/22/04
Current Wellbore Schematic	GL: 735' AMSL	DF: 740' AMSL			End P+A
	Wellhead is 10' above GL				5/2/04

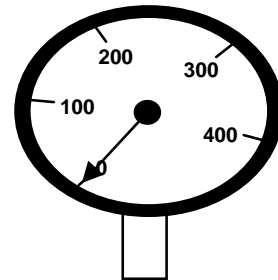


Casing and Tubing Detail						
Size	Weight	Grade	Type	ID	Top	Btm
11 3/4"	47#	---	Conductor	11.0"	0	50
8 5/8"	32#	---	Surface	7.921"	0	1231
2.5"	6.5#	H-40	Tubing	2.102"	0	1312

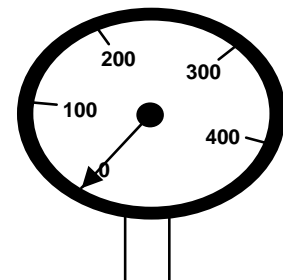
Well Fluids					
Item	Location	Top	Btm	Vol (bbl)	Comments
1	Tubing	949	1312	2.10	Bottom cement plug
2	Tubing	431	949	3.00	Fresh water spacer
3	Tubing	287	431	0.82	Gel pill
4	Tubing	0	287	1.67	Surface cement plug
5	Annulus	949	1327	27.47	Bottom cement plug
6	Annulus	243	949	37.38	Fresh water spacer
7	Annulus	166	243	3.29	Gel pill
8	Annulus	73	166	4.93	Surface cement plug
9	Annulus	11	73	3.29	Fresh water

Fish/Fill Information			
Item	Date	Depth	Comment
A	5/1/04	1312	Tubing string cemented in place

Tubing pressure 0
psi



Casing pressure 0
psi



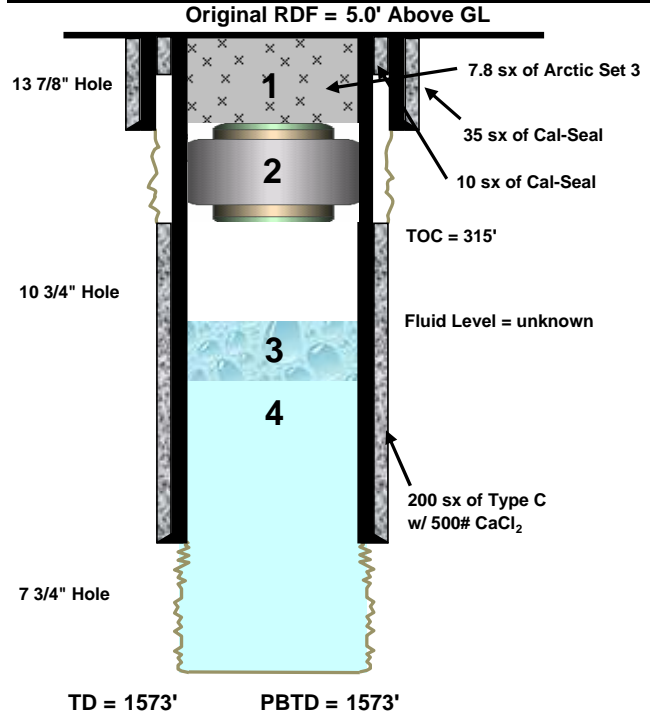
Cement Arctic Set 3; yield 4.44 cf/sx; 10.7 ppg

Gel Pill MI Gel; yield cf/sx; 10 ppg

Fresh Water



Umiat #10	Rig:	Cardwell Unitized Spudder Model K			
	Spud:	September 9, 1951			
Umiat	Meridian	Township	Range	Section	Start P+A
	Umiat	1N	1W	33	5/1/04
Current Wellbore Schematic	GL: 741' AMSL	DF: 746' AMSL	End P+A		
	Wellhead is 10' above GL				5/6/04



Casing and Tubing Detail						
Size	Weight	Grade	Type	ID	Top	Btm
?"	---	---	Structural	---	0	?
11 3/4"	---	---	Conductor	---	0	70
8 5/8"	---	---	Surface	---	0	1339

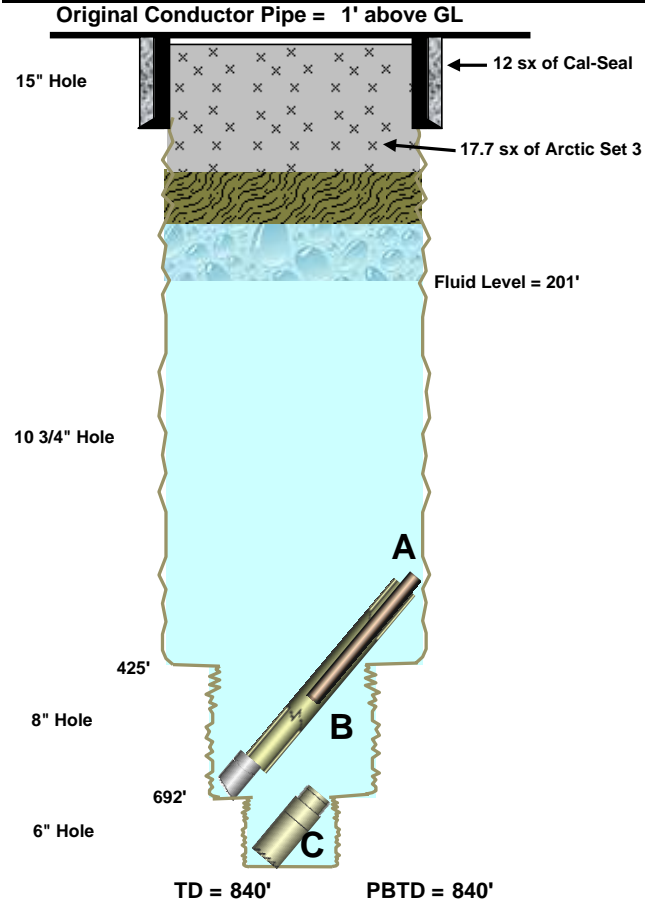
Wellbore Items						
Item	Location	Top	Btm	Vol (bbl)	Comments	
1	Casing	0	100	6.16	Surface cement plug	
2	Casing	100	105	---	Inflatable Bride plug	
3	Casing	? Unknown	? Unknown	---	Circulating Brine	
4	OH/Csg	? Unknown	? Unknown	---	Wellbore Fluids	

Fish/Fill Information			
Item	Date	Depth	Comment
Not Applicable			

	Cement	Arctic Set 3; yield 4.44 cf/sx; 10.7 ppg
	Wellbore Fluids	Unknown
	Fresh Water	



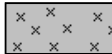

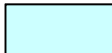

Umiat #4	Rig:	Bucyrus-Armstrong Cable Tool (29-W)			
	Spud:	May 26, 1950			
Umiat	Meridian	Township	Range	Section	Start P+A
	Umiat	1S	1W	3	5/7/04
Current Wellbore Schematic	GL: 482' AMSL	CP: 483' AMSL			End P+A
	Conductor Pipe 1' above GL				5/9/04



Casing and Tubing Detail						
Size	Weight	Grade	Type	ID	Top	Btm
11 3/4"	---	---	Conductor	---	0	33
???	---	---	Tubing	---	???	???

Well Fluids						
Item	Location	Top	Btm	Vol (bbl)	Comments	
1	OH/Csg	11	70	13.96	Surface cement plug	
2	Open Hole	70	102	3.33	Gel pill	
3	Open Hole	102	201	11.90	Fresh Water	
4	Open Hole	201	840	?	Wellbore Fluids	

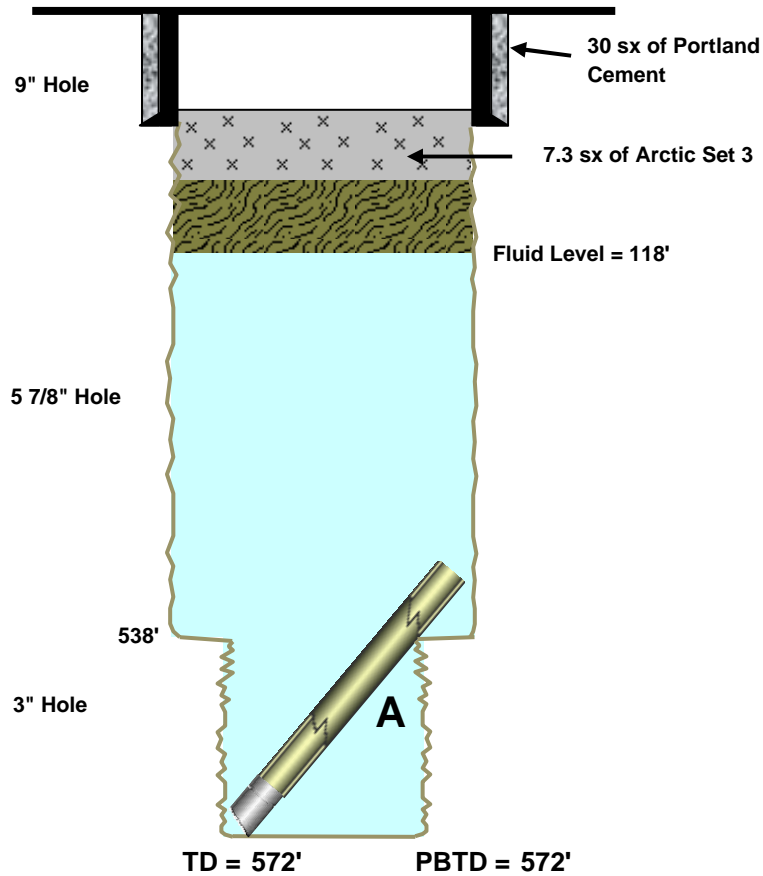
Fish/Fill Information				
Item	Date	Depth	Comment	
A	5/8/04	???	Rods cut and dropped in well inside tubing	
B	5/8/04	???	Tubing cut and dropped in well	
C	7/29/50	792	Cable Tool Fish	

-  Cement Arctic Set 3; yield 4.44 cf/sx; 10.7 ppg
-  Gel Pill MI Gel; yield cf/sx; 10 ppg
-  Wellbore Fluids Unknown
-  Fresh Water



Umiat #3	Rig:	Failing Model 1500 (314-C)			
	Spud:	November 15, 1946			
Umiat	Meridian	Township	Range	Section	Start P+A
	Umiat	1S	1W	3	5/9/04
Current Wellbore Schematic	GL: 351' AMSL	KB: 360' AMSL			End P+A
	Wellhead is 6' above GL				5/11/04

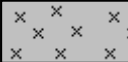

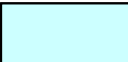
Original RKB = 9.0' Above GL



Casing and Tubing Detail						
Size	Weight	Grade	Type	ID	Top	Btm
7"	---	---	Conductor	---	8	72
???	---	---	Tubing	---	???	???

Well Fluids					
Item	Location	Top	Btm	Vol (bbl)	Comments
1	OH/Csg	66	93	5.75	Surface cement plug
2	Open Hole	93	118	0.82	Gel pill
3	Open Hole	118	572	?	Wellbore Fluids

Fish/Fill Information			
Item	Date	Depth	Comment
A	5/11/04	???	Tubing cut and dropped in well

-  Cement Arctic Set 3; yield 1.533 cf/sx; 10.7 ppg
-  Gel Pill MI Gel; 10 ppg
-  Wellbore Fluids Unknown