Non-Productive Time Report

Geothermal Resource Group

Well ID: AK-3

Well Name: AK-3

Field: Hot Springs Bay Va

Sect: 5 Town: 112W Rng: S005 County: Aleutians East State: AK

All Dates

Criteria: Well ID = AK-3

NPT Code	Rpt No	Report Date	Time From	Time To	Hours	End MD	Ops Code	Activity Description
WAIT	2	13-Aug-16	0:00	0:00	24.00	0	WOW	Weather Delay
WOE	5	16-Aug-16	19:00	20:00	1.00	0	WOE	Fly crews to lodge for evening, Unable to stay on site due to failed generators
WOE	5	16-Aug-16	20:00	0:00	4.00	0	WOD	Crews at lodge for night
WOE	6	17-Aug-16	0:00	9:00	9.00	0	WOD	Rig crews down for night at lodge.
WOO	7	18-Aug-16	8:00	12:00	4.00	0	WOW	Waiting on weather to allow Mayor and Priest to site for blessing ritual , 08:00 mix spud mud, prepare to spud hole , install 5' PQ barrel and core bit. fill water tanks.
KICK	9	20-Aug-16	17:00	18:00	1.00	176	STUCK	Work to free stuck pipe, free hot water flowing from annulus, due to plugged inner barrel. Free pipe and gain circulation through core rods. Rig up pack off to seal 8"casing to HWT core rods pump cold water to hole.
KICK	9	20-Aug-16	18:00	0:00	6.00	176	KILL	Pump 60 gpm cold water 56 degrees trough core rods to cool hole
KICK	10	21-Aug-16	0:00	7:00	7.00	176	KICK	Well kicked. Steam flow to surface. Lost rod due to foot clamp slipping. Top of HWT rod 2' below foot clamp.
KICK	10	21-Aug-16	7:00	15:30	8.50	176	FISH	fly fishing tool from lay down yard,connect inside grapple ,run in on new HWT core rod, catch fish bring through foot camp. secure in head, break down fishing joint. Well blowing and flowing 66 gpm,
KICK	10	21-Aug-16	15:30	17:30	2.00	176	WELLHD	Rig up and install10' joint to string , shut in flow, secure well from blowing, begin pumping cold water into well bore. 60 degree in 136 F out,
KICK	10	21-Aug-16	17:30	0:00	6.50	176	WELLHD	Secure poor boy packoff from HWT to 8" casing begin pumping 60 gpm of 60 degree water through string into hole. Hole secure.
KICK	11	22-Aug-16	0:00	7:00	7.00	176	WELLHD	Continue pumping 35 gpm 60 degree cold water into 8" casing , packed off on top with poor boy packer.
KICK	11	22-Aug-16	7:00	15:00	8.00	176	WELLHD	Continue pumping cold water into hole from 176'. attend conference meeting on at City of Akutan 10:0013:00, discuss cementing options and well control plan. prepare to pump 10 sks of portland cement from 88' as a drift plug.
KICK	11	22-Aug-16	15:00	15:30	0.50	176	TRPO	Pull 100' of rods , cooling hole after pulling 2 doubles , then 2 doubles and 1 double. position bottom of core rod at 88'.
KICK	11	22-Aug-16	15:30	16:30	1.00	176	CMTPL	Mix and pump 10- 92.4 lbs sacks of portland cement into 77 gallons of water, pump through string as drift plug, chasing with 70 gallons of displacement. shut hole in monitor discharge, clean equipment.
KICK	11	22-Aug-16	16:30	17:30	1.00	176	WOC	Rotate pipe each 15 minutes, to ensure free. initial static hole with top of fluid 3' below top of 8" casing , after 1 hour, approx. . 5-1 gallon flowing out of hole.
KICK	11	22-Aug-16	17:30	0:00	6.50	176	WOC	Wait on cement, grab sample placed in warm laundry tent to cure. Flow from 8" casing measured at 11-13 gpm, temp. building to 186 degrees at 00:00
KICK	12	23-Aug-16	0:00	3:00	3.00	176	WOC	pump cold water through core rods to cool hole prior to running in hole to tag top of cement.Initial reading 186 degrees F, lift pipe 1 foot and rotate, pipe free. begin pumping 60 degree F cold water into hole through core rod. to cool hole prior to tag top of cement. water temp at 00:15 186F, 00:30 , 148: 00:45-138: 01:30 134: 02:00-120F
KICK	12	23-Aug-16	3:00	3:30	0.50	176	WELLHD	Take off poor boy packoff, prior to lowering rod into hole to tag top of cement. Starting temp of discharge 120F
KICK	12	23-Aug-16	3:30	4:00	0.50	176	TRPI	Run 20' into hole start temp. 115 F- joint down 142F, at 109'
KICK	12	23-Aug-16	4:00	4:15	0.25	176	TRPI	Run in hole with 80' of rod temp begin at 115F end at 126F, tag top of cement at 172' BGS, circulating hole at top of cement fluid temp out 114F, pumping 30 gpm.
KICK	12	23-Aug-16	4:15	6:00	1.75	176	PUMP	Pumping cold water to cool hole,Discuss with GRG, Bill Rickard , plan to re cement hole to stop flow.

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Field: Hot Springs Bay Va

Sect: 5 Town: 112W Rng: S005 County: Aleutians East State: AK

All Dates

NPT Code	Rpt No	Report Date	Time From	Time To	Hours	End MD	Ops Code	Activity Description
KICK	12	23-Aug-16	6:00	7:00	1.00	176	PUMP	Continue to pump cold water, change out stripping rubbers on packoff, attempt to gain shut in pressure, estimate at 4-9 psi, out floe from 8" now at 11-13 gpm,
KICK	12	23-Aug-16	7:00	8:30	1.50	176	PUMP	Continue to pump cold water through core rod into hole with bottom of rod at 170', pull rod to 168' prepare to mix and pump 9sks of cement in a balance plug.
KICK	12	23-Aug-16	8:30	9:15	0.75	176	CMTPL	Mix 9 bags of cement in 70 gallons of water, 14.5 lb/gal cement mix, pump into core rod and displace with 37 gallons of water, trip out with core rod to 49'. shut down,
KICK	12	23-Aug-16	9:15	11:00	1.75	176	WOC	wait on cement to set, rotate and lift rods every 15 min,begin time to see when fluid level returns to top of 8" casing . took 1 hour and 15 min to see any water flow out of casing after cement down. minimum flow, less than 0.25 gpm.
WOE	23	03-Sep-16	6:30	11:00	4.50	1725	CIRC	Circulate hole from 1725', wait on weather to fly additional core rod to site (winds blowing over 35 KNTS). Receive 8 jts of HQ in first delivery at 10:45, 15 jts of used rod from village yard at 11:00 hrs.
WOO	25	05-Sep-16	6:30	9:00	2.50	1955	WOO	Waiting on well design after PT data review. Receive well plan: From the current blank run 4 perforated / 1 blank alternating 4 to 1 until run out of perf pipe, then 50 joints of blank. Top of lap joint (TOL): 755' BGS.
				Well Total:	**115.00**			

Report

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