

January 8, 2025

Dawn N.S. Chang  
Department of Land and Natural Resources  
Kalanimoku Building  
1151 Punchbowl St.  
Honolulu, HI 96813

**SUBJECT: PRODUCTION AND INJECTION REPORTS – DECEMBER 2024**

Dear Ms. Chang:

Pursuant to DLNR Regulation 18-183-86, Puna Geothermal Venture hereby submits the required production and injection reports.

Should you or your staff have any questions, please contact me.

Sincerely,



Virginia Aragon-Barnes

Environmental Compliance Coordinator

Attachment: 2024 December Production and Injection Reports

cc: PGV File

# PUNA GEOTHERMAL VENTURE COMBINED PRODUCTION DATA

DATE	STEAM FLOW (K LB)	BRINE FLOW (K LB)	TOTAL MASS (K LB)	% BRINE	% STEAM	AVG STEAM FLOW	AVG BRINE FLOW (K LB/HR)	AVG TOTAL MASS FLOW (K LB/HR)	AVG. NETPOWER (MW)			AVG WELLHEAD TEMP (F)	HRS ON PROD
									MAIN PLANT	BTM UNIT	TOTAL		
12/1/2024	11,849	25,106	36,955	67.9	32.1	494	1046	1540	26.4	7.3	33.7	458	24
12/2/2024	11,693	24,977	36,671	68.1	31.9	487	1041	1528	26.0	7.2	33.2	457	24
12/3/2024	11,585	24,901	36,487	68.2	31.8	483	1038	1520	25.8	7.1	32.9	460	24
12/4/2024	11,469	24,942	36,411	68.5	31.5	478	1039	1517	25.5	7.0	32.5	459	24
12/5/2024	11,580	24,689	36,269	68.1	31.9	483	1029	1511	25.7	7.0	32.7	461	24
12/6/2024	11,623	24,824	36,447	68.1	31.9	484	1034	1519	25.8	7.1	33.0	456	24
12/7/2024	11,572	24,784	36,356	68.2	31.8	482	1033	1515	25.7	7.0	32.7	459	24
12/8/2024	11,543	24,749	36,292	68.2	31.8	481	1031	1512	25.7	7.0	32.6	457	24
12/9/2024	11,447	24,783	36,230	68.4	31.6	477	1033	1510	25.4	7.0	32.4	456	24
12/10/2024	11,165	23,960	35,125	68.2	31.8	465	998	1464	24.7	6.1	30.8	461	24
12/11/2024	11,393	23,446	34,839	67.3	32.7	475	977	1452	25.3	7.0	32.2	457	24
12/12/2024	11,434	24,066	35,500	67.8	32.2	476	1003	1479	25.4	6.9	32.3	459	24
12/13/2024	10,669	23,361	34,030	68.6	31.4	445	973	1418	23.5	6.6	30.1	463	24
12/14/2024	10,494	23,658	34,151	69.3	30.7	437	986	1423	23.1	7.1	30.1	466	24
12/15/2024	10,465	24,171	34,636	69.8	30.2	436	1007	1443	23.0	6.6	29.6	466	24
12/16/2024	10,462	24,171	34,632	69.8	30.2	436	1007	1443	23.0	6.6	29.6	467	24
12/17/2024	10,802	24,065	34,867	69.0	31.0	450	1003	1453	23.8	6.9	29.8	460	24
12/18/2024	11,228	23,104	34,332	67.3	32.7	468	963	1430	24.9	6.4	31.3	460	24
12/19/2024	11,484	23,613	35,097	67.3	32.7	479	984	1462	25.5	6.6	32.1	459	24
12/20/2024	11,530	29,759	41,288	72.1	27.9	480	1240	1720	25.6	6.7	32.3	459	24
12/21/2024	11,591	25,352	36,942	68.6	31.4	483	1056	1539	25.8	6.9	32.7	456	24
12/22/2024	11,477	25,814	37,292	69.2	30.8	478	1076	1554	25.5	6.9	32.4	456	24
12/23/2024	11,353	23,855	35,207	67.8	32.2	473	994	1467	25.2	6.9	32.1	455	24
12/24/2024	7,144	17,082	24,226	70.5	29.5	298	712	1009	14.8	5.5	20.3	485	24
12/25/2024	6,432	18,935	25,367	74.6	25.4	268	789	1057	13.0	5.7	18.7	475	24
12/26/2024	7,151	21,944	29,095	75.4	24.6	298	914	1212	14.8	6.4	21.2	478	24
12/27/2024	8,177	24,101	32,277	74.7	25.3	341	1004	1345	17.3	7.0	24.3	476	24
12/28/2024	9,137	23,697	32,834	72.2	27.8	381	987	1368	19.7	7.1	26.8	479	24
12/29/2024	9,061	24,126	33,187	72.7	27.3	378	1005	1383	19.5	7.3	26.8	480	24
12/30/2024	6,810	19,627	26,437	74.2	25.8	284	818	1102	14.0	5.6	19.5	481	24
12/31/2024	8,781	27,014	35,795	75.5	24.5	366	1126	1491	18.8	6.9	25.7	465	24
<b>Mo. Totals/Avg</b>	<b>322,599</b>	<b>742,676</b>	<b>1,065,275</b>	<b>69.9</b>	<b>30.1</b>	<b>434</b>	<b>998</b>	<b>1432</b>	<b>22.8</b>	<b>6.7</b>	<b>29.6</b>	<b>464</b>	<b>24</b>

**PUNA GEOTHERMAL VENTURE**  
**PRODUCTION WELL DATA**

DATE	KS-10		KS-14		KS-17		KS-18		KS-19		KS-22	
	AVG WHP (PSIG)	AVG WHT (F)	AVG WHP (PSIG)	AVG WHT (F)	AVG WHP (PSIG)	AVG WHT (F)	AVG WHP (PSIG)	AVG WHT (F)	AVG WHP (PSIG)	AVG WHT (F)	AVG WHP (PSIG)	AVG WHT (F)
12/1/2024			0	73	420	446	557	467	448	458	445	460
12/2/2024			0	73	430	449	554	464	447	458	444	460
12/3/2024			0	73	436	450	550	470	449	459	451	461
12/4/2024			0	73	428	448	552	469	448	458	451	461
12/5/2024			0	73	457	455	551	469	449	458	452	461
12/6/2024			0	73	409	443	547	461	450	459	453	462
12/7/2024			0	73	412	445	547	478	450	456	450	458
12/8/2024			0	70	417	445	546	466	451	456	451	461
12/9/2024			0	70	441	445	543	468	451	455	451	458
12/10/2024			0	70	498	460	541	473	449	455	452	458
12/11/2024			0	73	415	445	542	464	452	460	453	462
12/12/2024			0	73	431	449	543	466	448	459	451	461
12/13/2024			0	72	441	451	537	464	543	477	451	461
12/14/2024			0	72	426	447	530	461	617	493	451	462
12/15/2024			0	73	427	448	527	465	603	490	455	462
12/16/2024			0	73	495	461	531	468	529	476	456	462
12/17/2024			0	70	525	459	531	471	453	455	450	455
12/18/2024			0	70	475	454	547	470	449	457	450	458
12/19/2024			0	70	440	451	546	468	449	459	451	461
12/20/2024			0	70	427	448	545	469	446	458	451	462
12/21/2024			0	70	382	437	542	468	444	457	452	461
12/22/2024			0	70	390	439	540	463	445	460	452	462
12/23/2024			0	70	400	437	540	469	446	455	453	459
12/24/2024			0	70	589	475	539	470	961	535	451	459
12/25/2024			0	70	682	476	517	465	697	500	457	459
12/26/2024			0	70	634	489	510	462	638	499	462	464
12/27/2024			0	70	658	493	523	468	543	480	466	465
12/28/2024			0	70	640	489	546	470	653	498	450	460
12/29/2024			0	70	581	480	541	470	713	509	449	461
12/30/2024			0	70	595	482	535	471	702	507	478	467
12/31/2024			0	70	522	463	534	471	453	458	495	468
<b>Monthly Average</b>			0	71	481	456	540	468	522	471	454	461

**PUNA GEOTHERMAL VENTURE  
COMBINED INJECTION WELL DATA QUANTITIES OF FLUID INJECTED**

DATE	GEOFLUID KLB	WELL WATER KLB	RAW WATER KLB	TOTAL INJECTION		INJECTION		(R)22 GAL	R322 GAL	203 GAL	WPA-GG. GAL	G442 GAL	Bio- spense GAL	NaOH GAL	Royal Purple GAL	98% Acid GAL
				KLB	GAL	KPH	GPM									
12/1/2024	36,955	0	0	36,955	4,533,864	1540	3,149	0	0	0	30	12	1	0	0	14
12/2/2024	36,671	0	0	36,671	4,499,032	1528	3,124	0	0	0	40	18	0	0	0	14
12/3/2024	36,487	0	0	36,487	4,476,428	1520	3,109	0	0	0	30	12	1	0	0	13
12/4/2024	36,411	0	0	36,411	4,467,152	1517	3,102	0	0	0	45	18	0	0	0	14
12/5/2024	36,269	0	0	36,269	4,449,776	1511	3,090	0	0	0	20	12	0	0	0	15
12/6/2024	36,447	0	0	36,447	4,471,534	1519	3,105	0	0	0	25	18	0	0	0	16
12/7/2024	36,356	0	0	36,356	4,460,386	1515	3,097	0	0	0	27	12	0	0	0	15
12/8/2024	36,292	0	0	36,292	4,452,576	1512	3,092	0	0	0	33	18	1	0	0	16
12/9/2024	36,230	0	0	36,230	4,445,007	1510	3,087	0	0	0	25	15	0	0	0	16
12/10/2024	35,125	0	0	35,125	4,309,428	1464	2,993	0	0	0	30	15	1	0	0	13
12/11/2024	34,839	0	0	34,839	4,274,327	1452	2,968	0	0	0	30	13	1	0	0	15
12/12/2024	35,500	0	0	35,500	4,355,345	1479	3,025	0	0	0	35	17	0	0	0	15
12/13/2024	34,030	0	0	34,030	4,175,063	1418	2,899	0	0	0	35	12	0	0	0	14
12/14/2024	34,151	0	0	34,151	4,189,928	1423	2,910	0	0	0	20	17	0	0	0	15
12/15/2024	34,636	0	0	34,636	4,249,352	1443	2,951	0	0	0	40	16	1	0	0	14
12/16/2024	34,632	0	0	34,632	4,248,945	1443	2,951	0	0	0	20	15	0	0	0	15
12/17/2024	34,867	0	0	34,867	4,277,762	1453	2,971	0	0	0	40	10	1	0	0	13
12/18/2024	34,332	0	0	34,332	4,212,055	1430	2,925	0	0	0	25	20	1	0	0	13
12/19/2024	35,097	0	0	35,097	4,305,963	1462	2,990	0	0	0	28	13	1	0	0	14
12/20/2024	41,288	0	0	41,288	5,065,543	1720	3,518	0	0	0	27	16	1	0	0	13
12/21/2024	36,942	0	0	36,942	4,532,358	1539	3,147	0	0	0	25	13	1	0	0	15
12/22/2024	37,292	0	0	37,292	4,575,224	1554	3,177	0	0	0	15	18	1	0	0	14
12/23/2024	35,207	0	0	35,207	4,319,452	1467	3,000	0	0	0	10	10	1	0	0	15
12/24/2024	24,226	0	0	24,226	2,972,245	1009	2,064	0	0	0	10	20	1	0	0	14
12/25/2024	25,367	0	0	25,367	3,112,163	1057	2,161	0	0	0	30	15	0	0	0	13
12/26/2024	29,095	0	0	29,095	3,569,520	1212	2,479	0	0	0	20	15	0	0	0	15
12/27/2024	32,277	0	0	32,277	3,960,005	1345	2,750	0	0	0	25	12	3	0	0	17
12/28/2024	32,834	0	0	32,834	4,028,274	1368	2,797	0	0	0	15	16	1	0	0	14
12/29/2024	33,187	0	0	33,187	4,071,654	1383	2,828	0	0	0	25	13	1	0	0	16
12/30/2024	26,437	0	0	26,437	3,243,460	1102	2,252	0	0	0	25	13	1	0	0	15
12/31/2024	35,795	0	0	35,795	4,391,547	1491	3,050	0	0	0	10	10	0	0	0	15
Total	1,065,275	0	0	1,065,275	130,695,368	44,366	90,761	0	0	0	815	454	20	0	0	450
Minimum	24,226	0	0	24,226	2,972,245	1,009	2,064	0	0	0	10	10	0	0	0	13
Average	34,364	0	0	34,364	4,215,980	1,432	2,928	0	0	0	26	15	1	0	0	15
Maximum	41,288	0	0	41,288	5,065,543	1,720	3,518	0	0	0	45	20	3	0	0	17

# PUNA GEOTHERMAL VENTURE

## KS-3 INJECTION WELL DATA QUANTITIES OF FLUID INJECTED

DATE	HRS ON INJ.	GEO- FLUID (KLB)	SUPPLY Water (KLB)	TOTAL		AVERAGE INJ. RATE		WELLHEAD PRESS. (PSIG)		AVERAGE ANNULUS N2 PRESS (PSIG)	AVERAGE INJ TEMP (DEG F)
				KBL	GAL	KPH	GPM	AVG	MAX		
12/1/2024	0	0	0	0	0	0	0	78	80	458	72
12/2/2024	0	0	0	0	0	0	0	80	80	435	78
12/3/2024	0	0	0	0	0	0	0	77	78	420	73
12/4/2024	0	0	0	0	0	0	0	80	85	525	77
12/5/2024	0	0	0	0	0	0	0	87	95	713	75
12/6/2024	0	0	0	0	0	0	0	353	365	998	73
12/7/2024	0	0	0	0	0	0	0	365	365	960	66
12/8/2024	0	0	0	0	0	0	0	354	370	930	63
12/9/2024	0	0	0	0	0	0	0	380	380	968	73
12/10/2024	0	0	0	0	0	0	0	375	380	968	73
12/11/2024	0	0	0	0	0	0	0	374	380	840	71
12/12/2024	0	0	0	0	0	0	0	363	365	818	70
12/13/2024	0	0	0	0	0	0	0	365	365	788	67
12/14/2024	0	0	0	0	0	0	0	365	365	773	67
12/15/2024	0	0	0	0	0	0	0	368	370	750	68
12/16/2024	0	0	0	0	0	0	0	368	370	728	65
12/17/2024	0	0	0	0	0	0	0	369	370	705	79
12/18/2024	0	0	0	0	0	0	0	360	360	690	77
12/19/2024	0	0	0	0	0	0	0	355	360	683	73
12/20/2024	0	0	0	0	0	0	0	360	370	668	73
12/21/2024	0	0	0	0	0	0	0	375	380	653	73
12/22/2024	0	0	0	0	0	0	0	375	375	638	73
12/23/2024	0	0	0	0	0	0	0	375	375	630	73
12/24/2024	0	0	0	0	0	0	0	216	370	608	65
12/25/2024	0	0	0	0	0	0	0	191	320	585	69
12/26/2024	0	0	0	0	0	0	0	370	370	570	80
12/27/2024	0	0	0	0	0	0	0	370	370	555	74
12/28/2024	0	0	0	0	0	0	0	370	370	540	75
12/29/2024	0	0	0	0	0	0	0	378	385	525	69
12/30/2024	0	0	0	0	0	0	0	375	380	503	62
12/31/2024	0	0	0	0	0	0	0	370	370	458	69
Total	0	0	0	0	0						
Minimum	0	0	0	0	0	0	0	77	78	420	62
Average	0	0	0	0	0	0	0	311	323	680	71
Maximum	0	0	0	0	0	0	0	380	385	998	80

# PUNA GEOTHERMAL VENTURE

## KS-11 INJECTION WELL DATA QUANTITIES OF FLUID INJECTED

DATE	HRS ON INJ.	GEO-FLUID (KLB)	SUPPLY Water (KLB)	TOTAL		AVERAGE INJ. RATE		WELLHEAD PRESS. (PSIG)		AVERAGE ANNULUS N2 PRESS (PSIG)	AVERAGE INJ TEMP (DEG F)
				KBL	GAL	KPH	GPM	AVG	MAX		
12/1/2024	0	0	0	0	0	0	0	21	22	30	70
12/2/2024	0	0	0	0	0	0	0	20	20	30	70
12/3/2024	0	0	0	0	0	0	0	21	22	30	70
12/4/2024	0	0	0	0	0	0	0	21	21	30	73
12/5/2024	0	0	0	0	0	0	0	13	15	30	70
12/6/2024	0	0	0	0	0	0	0	13	15	30	70
12/7/2024	0	0	0	0	0	0	0	15	15	30	70
12/8/2024	0	0	0	0	0	0	0	13	15	30	70
12/9/2024	0	0	0	0	0	0	0	15	15	30	70
12/10/2024	0	0	0	0	0	0	0	8	15	30	70
12/11/2024	0	0	0	0	0	0	0	13	15	30	70
12/12/2024	0	0	0	0	0	0	0	11	12	30	70
12/13/2024	0	0	0	0	0	0	0	5	10	30	65
12/14/2024	0	0	0	0	0	0	0	5	10	30	65
12/15/2024	0	0	0	0	0	0	0	10	10	30	68
12/16/2024	0	0	0	0	0	0	0	9	9	30	70
12/17/2024	0	0	0	0	0	0	0	9	9	30	70
12/18/2024	0	0	0	0	0	0	0	7	9	30	71
12/19/2024	0	0	0	0	0	0	0	8	8	8	74
12/20/2024	0	0	0	0	0	0	0	8	8	0	73
12/21/2024	0	0	0	0	0	0	0	8	8	0	73
12/22/2024	0	0	0	0	0	0	0	8	8	0	73
12/23/2024	0	0	0	0	0	0	0	6	7	0	70
12/24/2024	0	0	0	0	0	0	0	0	0	0	68
12/25/2024	0	0	0	0	0	0	0	0	0	0	68
12/26/2024	0	0	0	0	0	0	0	0	0	0	70
12/27/2024	0	0	0	0	0	0	0	0	0	0	70
12/28/2024	0	0	0	0	0	0	0	0	0	0	74
12/29/2024	0	0	0	0	0	0	0	0	0	0	64
12/30/2024	0	0	0	0	0	0	0	0	0	0	70
12/31/2024	0	0	0	0	0	0	0	0	0	0	69
Total	0	0	0	0	0						
Minimum	0	0	0	0	0	0	0	0	0	0	64
Average	0	0	0	0	0	0	0	8	10	18	70
Maximum	0	0	0	0	0	0	0	21	22	30	74

# PUNA GEOTHERMAL VENTURE

## KS-13 INJECTION WELL DATA QUANTITIES OF FLUID INJECTED

DATE	HRS ON INJ.	GEO-FLUID (KLB)	SUPPLY Water (KLB)	TOTAL		AVERAGE INJ. RATE		WELLHEAD PRESS. (PSIG)		AVERAGE ANNULUS N2 PRESS (PSIG)	AVERAGE INJ TEMP (DEG F)
				KBL	GAL	KPH	GPM	AVG	MAX		
12/1/2024	24	1764	0	1764	218063	70	151	198	200	1178	169
12/2/2024	24	1739	0	1739	214880	69	149	200	200	1148	170
12/3/2024	24	1732	0	1732	214083	69	149	200	200	1118	173
12/4/2024	24	1732	0	1732	214032	69	149	200	200	1110	175
12/5/2024	24	1725	0	1725	213241	69	148	195	200	1170	173
12/6/2024	24	1717	0	1717	212195	68	147	200	200	1133	174
12/7/2024	24	1715	0	1715	212013	68	147	191	192	1095	171
12/8/2024	24	1704	0	1704	210628	68	146	190	190	1065	172
12/9/2024	24	1690	0	1690	208824	67	145	193	195	1028	171
12/10/2024	24	1663	0	1663	205593	66	143	185	185	990	168
12/11/2024	24	1713	0	1713	211713	68	147	198	200	1260	174
12/12/2024	24	1708	0	1708	211053	68	147	190	190	1223	172
12/13/2024	24	1578	0	1578	194992	63	135	170	190	1170	173
12/14/2024	24	1549	0	1549	191442	62	133	160	170	1133	172
12/15/2024	24	1576	0	1576	194823	63	135	176	182	1103	173
12/16/2024	24	1545	0	1545	190979	61	133	185	190	1065	173
12/17/2024	24	1543	0	1543	190673	61	132	182	185	1028	171
12/18/2024	24	1560	0	1560	192827	62	134	185	190	1313	172
12/19/2024	24	1680	0	1680	207648	67	144	188	190	1283	174
12/20/2024	24	1757	0	1757	217105	70	151	195	195	1238	171
12/21/2024	24	1761	0	1761	217698	70	151	222	225	1223	175
12/22/2024	24	1632	0	1632	201673	65	140	231	232	1185	177
12/23/2024	24	1611	0	1611	199096	64	138	238	240	1148	178
12/24/2024	24	1257	0	1257	155352	50	108	58	75	1080	164
12/25/2024	24	1227	0	1227	151598	49	105	88	120	998	173
12/26/2024	24	1274	0	1274	157496	51	109	145	145	1005	188
12/27/2024	24	1390	0	1390	171770	55	119	180	205	1133	186
12/28/2024	24	1170	0	1170	144554	46	100	99	180	983	177
12/29/2024	24	211	0	211	26084	8	18	55	80	863	171
12/30/2024	24	2347	0	2347	290117	93	201	250	420	1028	166
12/31/2024	24	1920	0	1920	237290	76	165	199	205	1350	192
Total	744	49188	0	49188	6079535	1955	4222				
Minimum	24	211	0	211	26084	8	18	55	75	863	164
Average	24	1587	0	1587	196114	63	136	179	193	1124	174
Maximum	24	2347	0	2347	290117	93	201	250	420	1350	192

# PUNA GEOTHERMAL VENTURE

## KS-15 INJECTION WELL DATA QUANTITIES OF FLUID INJECTED

DATE	HRS ON INJ.	GEO-FLUID (KLB)	SUPPLY Water (KLB)	TOTAL		AVERAGE INJ. RATE		WELLHEAD PRESS. (PSIG)		AVERAGE ANNULUS N2 PRESS (PSIG)	AVERAGE INJ TEMP (DEG F)
				KBL	GAL	KPH	GPM	AVG	MAX		
12/1/2024	0	0	0	0	0	0	0	0	0	0	70
12/2/2024	0	0	0	0	0	0	0	0	0	0	70
12/3/2024	0	0	0	0	0	0	0	0	0	0	70
12/4/2024	0	0	0	0	0	0	0	0	0	0	70
12/5/2024	0	0	0	0	0	0	0	0	0	0	70
12/6/2024	0	0	0	0	0	0	0	0	0	0	70
12/7/2024	0	0	0	0	0	0	0	0	0	0	70
12/8/2024	0	0	0	0	0	0	0	0	0	0	70
12/9/2024	0	0	0	0	0	0	0	0	0	0	70
12/10/2024	0	0	0	0	0	0	0	0	0	0	70
12/11/2024	0	0	0	0	0	0	0	0	0	0	70
12/12/2024	0	0	0	0	0	0	0	0	0	0	70
12/13/2024	0	0	0	0	0	0	0	0	0	0	70
12/14/2024	0	0	0	0	0	0	0	0	0	0	70
12/15/2024	0	0	0	0	0	0	0	0	0	0	70
12/16/2024	0	0	0	0	0	0	0	0	0	0	70
12/17/2024	0	0	0	0	0	0	0	0	0	0	70
12/18/2024	0	0	0	0	0	0	0	0	0	0	70
12/19/2024	0	0	0	0	0	0	0	0	0	0	70
12/20/2024	0	0	0	0	0	0	0	0	0	0	70
12/21/2024	0	0	0	0	0	0	0	0	0	0	70
12/22/2024	0	0	0	0	0	0	0	0	0	0	70
12/23/2024	0	0	0	0	0	0	0	0	0	0	70
12/24/2024	0	0	0	0	0	0	0	0	0	0	70
12/25/2024	0	0	0	0	0	0	0	0	0	0	70
12/26/2024	0	0	0	0	0	0	0	0	0	0	70
12/27/2024	0	0	0	0	0	0	0	0	0	405	70
12/28/2024	6	615	0	615	75952	24	53	70	140	570	110
12/29/2024	24	2234	0	2234	276116	89	192	145	150	780	149
12/30/2024	24	3571	0	3571	441370	142	307	273	395	840	143
12/31/2024	24	2513	0	2513	310612	100	216	183	185	788	174
Total	78	8933	0	8933	1104050						
Minimum	0	0	0	0	0	0	0	0	0	0	70
Average	3	288	0	288	35615	11	25	22	28	109	80
Maximum	24	3571	0	3571	441370	142	307	273	395	840	174



# PUNA GEOTHERMAL VENTURE

## KS-20 INJECTION WELL DATA QUANTITIES OF FLUID INJECTED

DATE	HRS ON INJ.	GEO-FLUID (KLB)	SUPPLY Water (KLB)	TOTAL		AVERAGE INJ. RATE		WELLHEAD PRESS. (PSIG)		AVERAGE ANNULUS N2 PRESS (PSIG)	AVERAGE INJ TEMP (DEG F)
				KBL	GAL	KPH	GPM	AVG	MAX		
12/1/2024	24	4272	0	4272	527959	170	367	110	195	1110	170
12/2/2024	24	4261	0	4261	526659	169	366	193	195	1110	171
12/3/2024	24	4250	0	4250	525285	169	365	195	195	1110	168
12/4/2024	24	4232	0	4232	523029	168	363	188	190	1110	170
12/5/2024	24	4226	0	4226	522378	168	363	184	187	1103	172
12/6/2024	24	4251	0	4251	525461	169	365	184	188	1110	171
12/7/2024	24	4250	0	4250	525347	169	365	185	187	1110	166
12/8/2024	24	4254	0	4254	525753	169	365	190	190	1110	163
12/9/2024	24	4257	0	4257	526155	169	365	188	190	1110	165
12/10/2024	17	3020	0	3020	373286	120	259	185	185	1183	279
12/11/2024	17	2383	0	2383	294511	95	205	189	190	1178	166
12/12/2024	24	3397	0	3397	419913	135	292	188	190	1335	173
12/13/2024	24	3172	0	3172	392045	126	272	170	190	1320	168
12/14/2024	24	3206	0	3206	396260	127	275	165	170	1320	169
12/15/2024	24	3285	0	3285	405996	131	282	175	180	1328	177
12/16/2024	24	3256	0	3256	402386	129	279	174	180	1320	174
12/17/2024	24	3257	0	3257	402553	129	280	174	180	1328	174
12/18/2024	24	3186	0	3186	393786	127	273	182	185	1328	170
12/19/2024	24	3374	0	3374	417018	134	290	186	189	1170	171
12/20/2024	24	3420	0	3420	422705	136	294	191	191	1170	173
12/21/2024	24	3656	0	3656	451873	145	314	214	220	1185	170
12/22/2024	24	3675	0	3675	454257	146	315	220	222	1185	172
12/23/2024	24	3699	0	3699	457150	147	317	224	225	1185	172
12/24/2024	24	2545	0	2545	314518	101	218	73	80	1095	169
12/25/2024	24	3266	0	3266	403688	130	280	147	164	1133	140
12/26/2024	24	3237	0	3237	400100	129	278	145	145	1155	186
12/27/2024	24	3249	0	3249	401544	129	279	178	200	1163	179
12/28/2024	24	3163	0	3163	390922	126	271	142	171	1140	177
12/29/2024	24	2737	0	2737	338238	109	235	111	112	1125	176
12/30/2024	24	8890	0	8890	1098828	353	763	259	408	1200	168
12/31/2024	24	4886	0	4886	603836	194	419	198	205	1133	181
Total	730	116212	0	116212	14363439	4618	9975				
Minimum	17	2383	0	2383	294511	95	205	73	80	1095	140
Average	24	3749	0	3749	463337	149	322	177	190	1183	174
Maximum	24	8890	0	8890	1098828	353	763	259	408	1335	279

# PUNA GEOTHERMAL VENTURE

## KS-21 INJECTION WELL DATA QUANTITIES OF FLUID INJECTED

DATE	HRS ON INJ.	GEO-FLUID (KLB)	SUPPLY Water (KLB)	TOTAL		AVERAGE INJ. RATE		WELLHEAD PRESS. (PSIG)		AVERAGE ANNULUS N2 PRESS (PSIG)	AVERAGE INJ TEMP (DEG F)
				KBL	GAL	KPH	GPM	AVG	MAX		
12/1/2024	24	30647	0	30647	3787842	1218	2630	110	195	997	173
12/2/2024	24	30401	0	30401	3757493	1208	2609	190	190	996	179
12/3/2024	24	30236	0	30236	3737060	1201	2595	193	195	998	173
12/4/2024	24	30180	0	30180	3730091	1199	2590	190	190	994	174
12/5/2024	24	30051	0	30051	3714157	1194	2579	184	190	1002	177
12/6/2024	24	30210	0	30210	3733878	1200	2593	188	190	1024	175
12/7/2024	24	30122	0	30122	3723026	1197	2585	186	190	1048	170
12/8/2024	24	30067	0	30067	3716195	1195	2581	195	195	1044	177
12/9/2024	24	30017	0	30017	3710028	1193	2576	190	190	1012	178
12/10/2024	24	30183	0	30183	3730549	1199	2591	184	188	1032	174
12/11/2024	24	30487	0	30487	3768103	1211	2617	190	190	1040	180
12/12/2024	24	30133	0	30133	3724379	1197	2586	188	190	1032	177
12/13/2024	24	29030	0	29030	3588026	1154	2492	170	189	1026	176
12/14/2024	24	29145	0	29145	3602226	1158	2502	163	170	1035	175
12/15/2024	24	29520	0	29520	3648533	1173	2534	173	180	1033	177
12/16/2024	24	29577	0	29577	3655580	1175	2539	180	180	1019	177
12/17/2024	24	29811	0	29811	3684536	1185	2559	179	180	1029	172
12/18/2024	24	29333	0	29333	3625442	1166	2518	183	185	942	177
12/19/2024	24	29785	0	29785	3681297	1184	2556	183	190	1053	175
12/20/2024	24	35808	0	35808	4425733	1423	3073	191	191	894	177
12/21/2024	24	31253	0	31253	3862787	1242	2682	215	220	960	180
12/22/2024	24	31710	0	31710	3919294	1260	2722	225	230	968	181
12/23/2024	24	29638	0	29638	3663206	1178	2544	229	230	1003	182
12/24/2024	24	20246	0	20246	2502375	805	1738	33	65	968	165
12/25/2024	24	20687	0	20687	2556877	822	1776	13	15	876	173
12/26/2024	24	24369	0	24369	3011924	968	2092	142	142	861	186
12/27/2024	24	27401	0	27401	3386691	1089	2352	180	205	962	185
12/28/2024	24	27645	0	27645	3416846	1099	2373	168	170	1008	182
12/29/2024	24	27761	0	27761	3431216	1103	2383	165	170	1132	181
12/30/2024	10	11434	0	11434	1413145	454	981	90	180	982	160
12/31/2024	24	26213	0	26213	3239809	1042	2250	203	205	1098	190
Total	730	883100	0	883100	109148344						
Minimum	10	11434	0	11434	1413145	454	981	13	15	861	160
Average	24	28487	0	28487	3520914	1132	2445	170	180	1002	177
Maximum	24	35808	0	35808	4425733	1423	3073	229	230	1132	190