

NO RISE REPORT

**1755 Riada Drive
New Braunfels, Texas**

Prepared by:



M&S ENGINEERING

CIVIL | ELECTRICAL | STRUCTURAL | MEP

TEXAS PROFESSIONAL ENGINEERING FIRM # F-1394
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04/29/2021

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April, 2021

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II. OVERVIEW

The project site is located at 1755 Riada Drive, New Braunfels Texas, in Comal County. The property lies along the Guadalupe River and a portion of the tract is located within the 100-year FEMA floodway, a portion lies in the 100-year floodplain, and the remaining lies in Zone X. The property is currently undeveloped. The proposed development will consist of the addition of a new elevated house, a pool, deck, and pool house. At the request of the owner this study was performed to determine the impact to the BFE of the proposed development.

As per the Comal County requirements the activity within the floodway must not increase the BFE for the 100-yr flood as calculated from the FEMA Flood Insurance Rate Map. This analysis was conducted using standard engineering methods that are acceptable by the County.

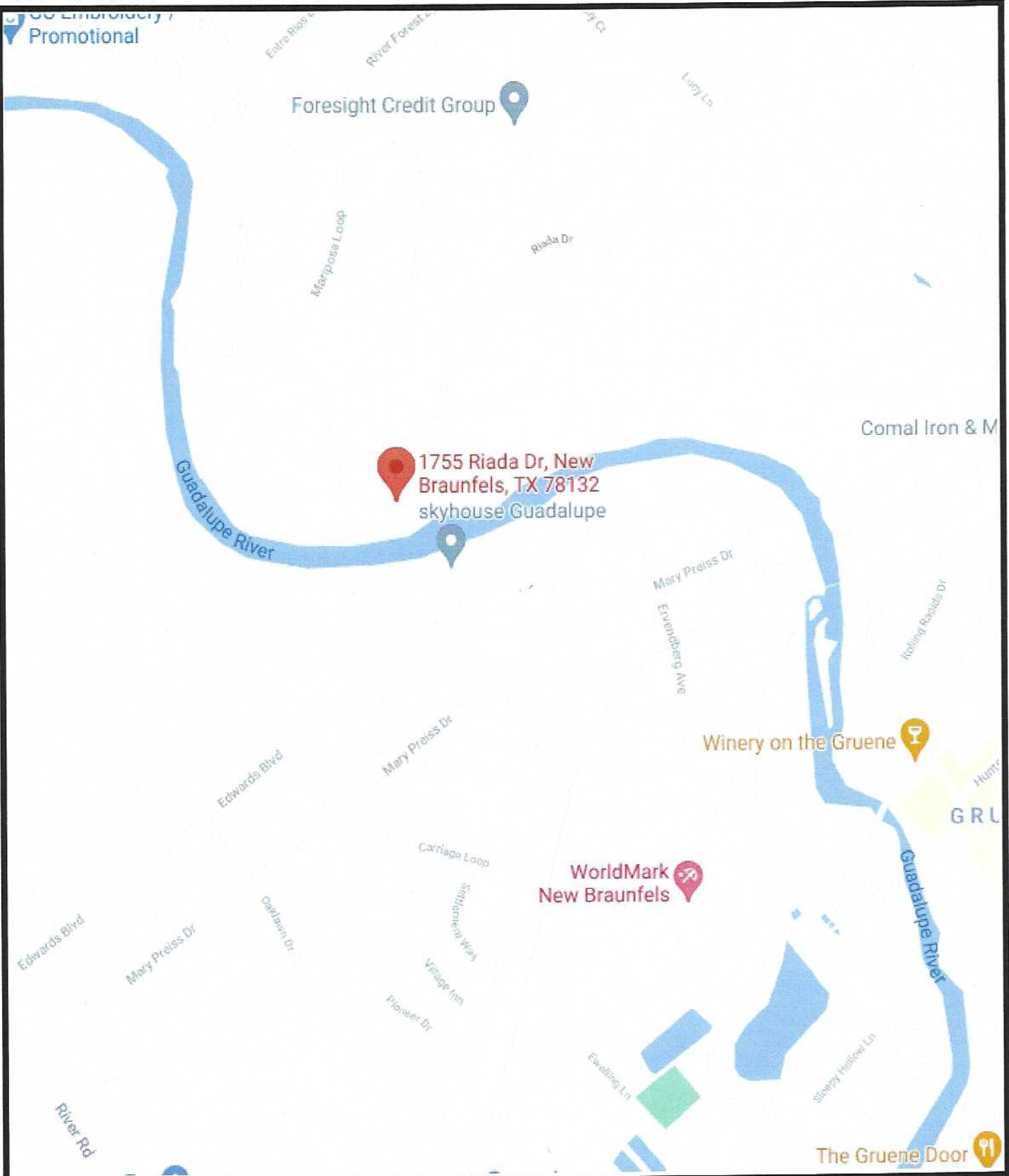
III. METHODS AND RESULTS

Comal County requires that it be shown that the placement of fill in the floodway has no impact (or creates no rise) in the water surface elevations both upstream and downstream of the proposed project. M&S performed a HEC-RAS analysis in order to determine the impact to the BFE that would result from the proposed development.

A new house, pool, pool house, and deck will be added to the site, partially within the floodplain and floodway. The finished floor elevation will be 645.00, approximately five feet above the BFE. The pool and pool house will both be elevated above the BFE. Cross Section 1462818 runs through the site. A blocked obstruction the length of the entire development was placed in the floodplain to model the maximum amount of impact the development could have. When comparing the existing conditions model to the proposed conditions the WSEL is not adversely affected up or downstream of the site due to development. At the cross section running through the site the WSEL shows no change, due to the clearing of the land for the house development. The model shows a net zero rise in the floodplain/floodway due to the development.

IV. EXHIBITS

LOCATION MAP



SHEET:	JOB:	
	DATE:	
	DRAWN:	PM:
	DESIGN:	DM:
	PEER:	OTHER:

LOCATION MAP

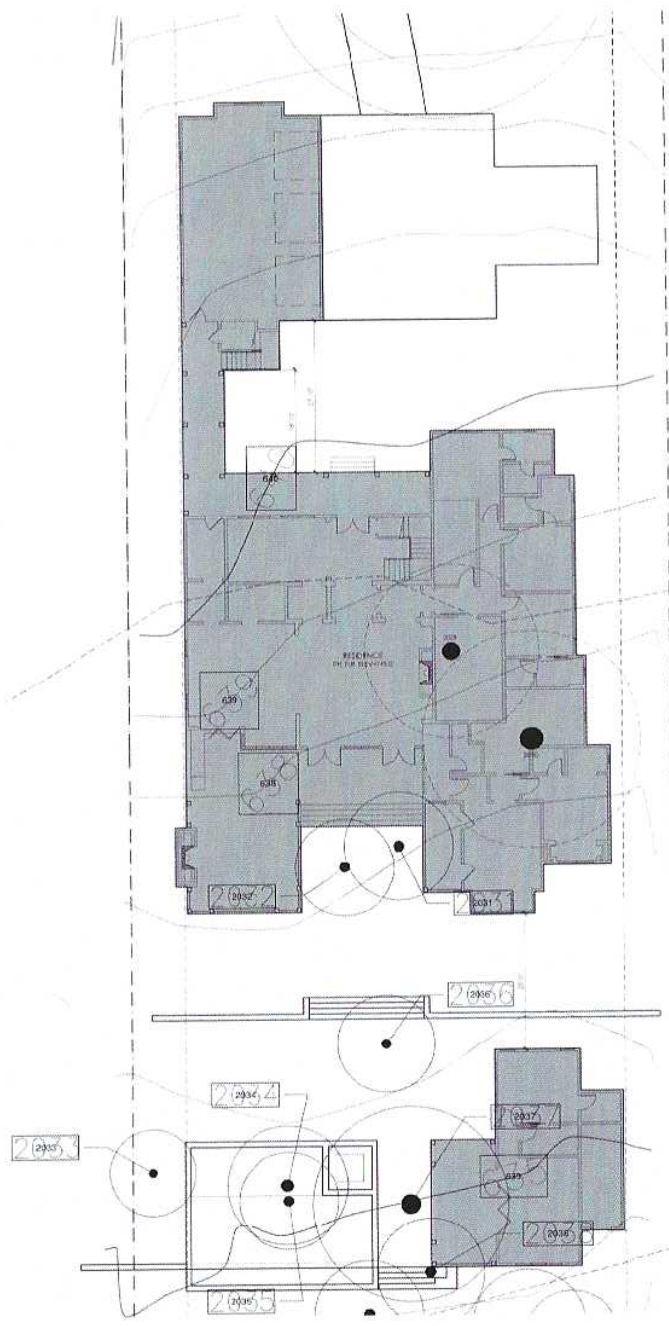
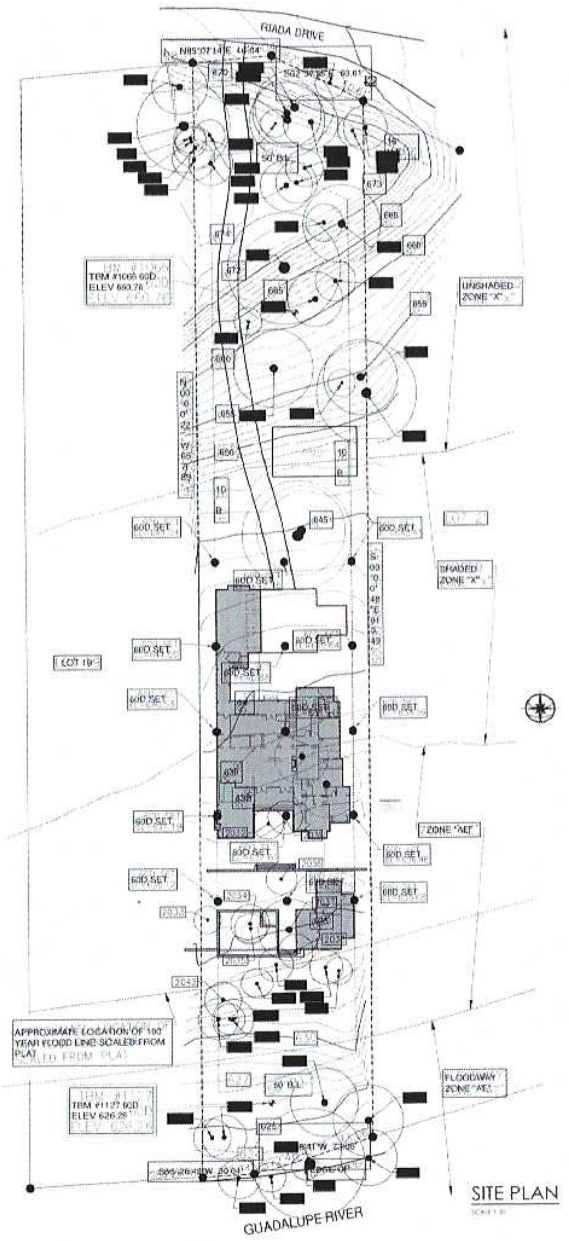


M&S ENGINEERING
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TX REG. LICENSED PROFESSIONAL ENGINEER # 1194

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	<small>QUALITY SYSTEM # 10044200</small>	
	<small>REGISTERED PROFESSIONAL ENGINEER # 1194</small>	

DEVELOPMENT PLAN

NO.	DESCRIPTION	DATE
0001	PRELIMINARY	10/20/11
0002	REVISED	11/01/11
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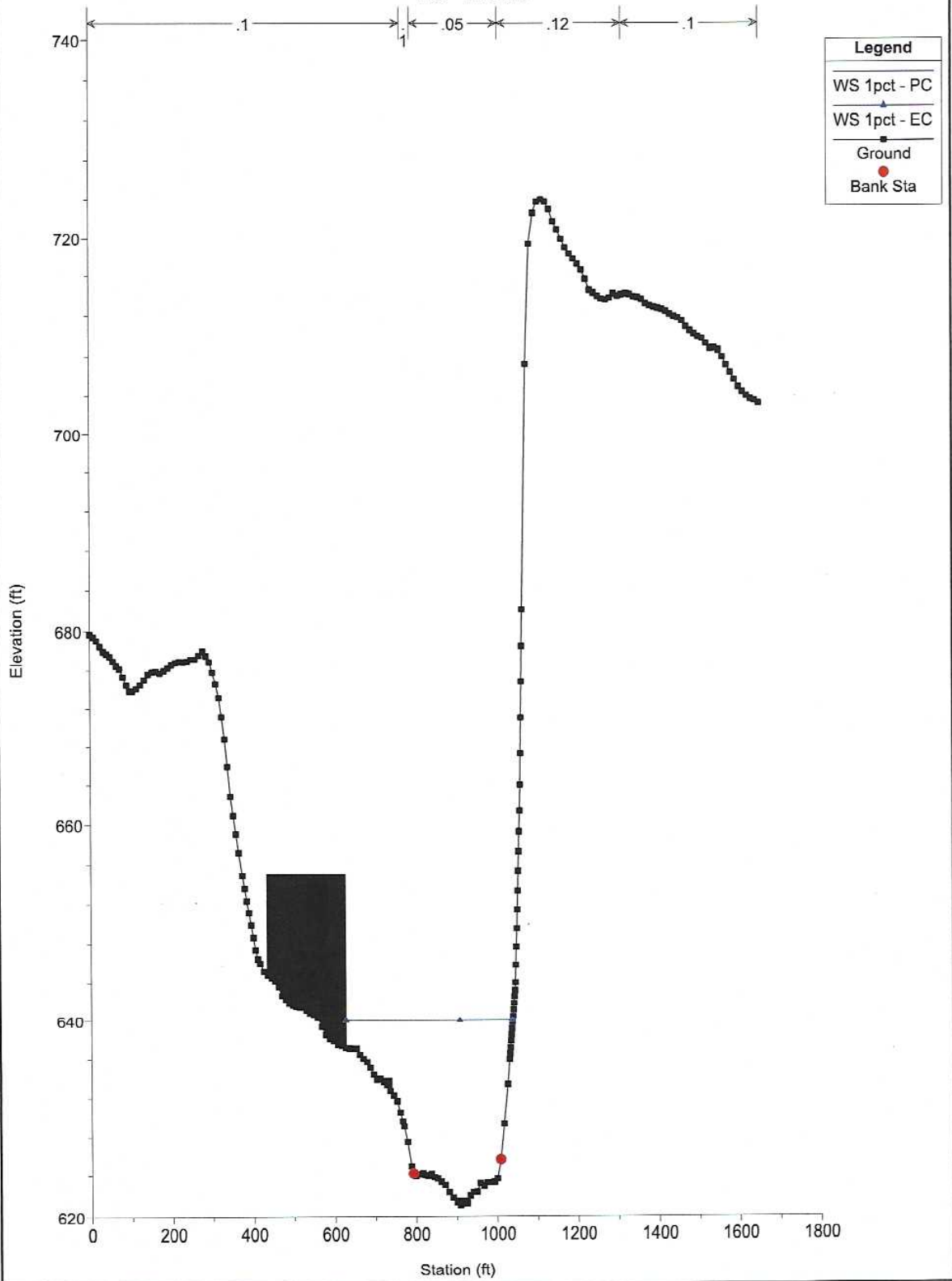
- GENERAL SITE NOTES:**
1. ALL UTILITIES SHOWN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY. THE CLIENT IS RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES.
 2. ALL UTILITIES TO BE PROTECTED SHALL BE IDENTIFIED BY THE CLIENT AND SHOWN ON THE SITE PLAN.
 3. THE CLIENT SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT AND STATE AGENCIES.
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DATE: 11/01/11
 DRAWN BY: J. A. JONES
 CHECKED BY: J. A. JONES
 TOTAL COUNT: 1

FEMA/FIRM MAP

HEC-RAS OUTPUT

1755Riada Plan: 1) PC 4/28/2021 2) EC 4/28/2021
RS = 1462818



HFC-RAS River GaudRiver Reach: DnStmCanyonLake Profile: 1cst (Continued)

Reach	River Sta	Profile	Plan	Q Total (cfs)	Min Ch Elev (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
DnStmCanyonLake	1482549	1pct	EC	41400.00	656.45	676.21		677.53	0.002082	9.60	5341.77	351.27	0.39
DnStmCanyonLake	1481744	1pct	PC	41400.00	654.85	675.35		676.12	0.001204	7.47	8427.85	413.86	0.30
DnStmCanyonLake	1481744	1pct	EC	41400.00	654.85	675.35		676.12	0.001204	7.47	8427.85	413.86	0.30
DnStmCanyonLake	1480631	1pct	PC	41400.00	650.81	674.32		674.94	0.000871	6.86	7211.43	430.89	0.26
DnStmCanyonLake	1480631	1pct	EC	41400.00	650.81	674.32		674.94	0.000871	6.86	7211.43	430.89	0.26
DnStmCanyonLake	1479793	1pct	PC	41400.00	650.47	673.34		674.11	0.001101	7.60	6709.56	472.51	0.29
DnStmCanyonLake	1479793	1pct	EC	41400.00	650.47	673.34		674.11	0.001101	7.60	6709.56	472.51	0.29
DnStmCanyonLake	1478920	1pct	PC	41400.00	650.26	672.04		672.98	0.001489	8.35	5861.34	368.44	0.33
DnStmCanyonLake	1478920	1pct	EC	41400.00	650.26	672.04		672.98	0.001489	8.35	5861.34	368.44	0.33
DnStmCanyonLake	1477917	1pct	PC	41400.00	651.53	669.84		671.10	0.002345	9.37	5501.90	427.89	0.40
DnStmCanyonLake	1477917	1pct	EC	41400.00	651.53	669.84		671.10	0.002345	9.37	5501.90	427.89	0.40
DnStmCanyonLake	1477189	1pct	PC	41400.00	650.54	667.81		669.12	0.003071	10.39	5230.85	457.88	0.46
DnStmCanyonLake	1477189	1pct	EC	41400.00	650.54	667.81		669.12	0.003071	10.39	5230.85	457.88	0.46
DnStmCanyonLake	1476440	1pct	PC	41400.00	650.51	665.22		666.59	0.003615	10.07	5470.87	521.91	0.49
DnStmCanyonLake	1476440	1pct	EC	41400.00	650.51	665.22		666.59	0.003615	10.07	5470.87	521.91	0.49
DnStmCanyonLake	1476345 Unnamed Spill 1	1pct	PC	41400.00	649.43	665.18		666.21	0.002343	8.29	5821.14	525.87	0.39
DnStmCanyonLake	1476345 Unnamed Spill 1	1pct	EC	41400.00	649.43	665.18		666.21	0.002343	8.29	5821.14	525.87	0.39
DnStmCanyonLake	1476276	1pct	PC	41400.00	647.26	665.36		665.98	0.001131	6.65	7715.57	571.03	0.28
DnStmCanyonLake	1476276	1pct	EC	41400.00	647.26	665.36		665.98	0.001131	6.65	7715.57	571.03	0.28
DnStmCanyonLake	1476176	1pct	PC	41400.00	646.97	664.69		665.78	0.002052	8.95	6015.06	516.73	0.38
DnStmCanyonLake	1476176	1pct	EC	41400.00	646.97	664.69		665.78	0.002052	8.95	6015.06	516.73	0.38
DnStmCanyonLake	1475258	1pct	PC	41400.00	642.86	663.23		664.17	0.001443	7.94	5985.60	493.53	0.32
DnStmCanyonLake	1475258	1pct	EC	41400.00	642.86	663.23		664.17	0.001443	7.94	5985.60	493.53	0.32
DnStmCanyonLake	1474323	1pct	PC	41400.00	639.57	659.07	657.23	661.70	0.005133	14.49	5150.49	800.96	0.60
DnStmCanyonLake	1474323	1pct	EC	41400.00	639.57	659.07	657.23	661.70	0.005133	14.49	5150.73	800.96	0.60
DnStmCanyonLake	1473388	1pct	PC	41400.00	636.76	655.31	651.04	657.21	0.004083	11.91	5070.43	719.79	0.53
DnStmCanyonLake	1473388	1pct	EC	41400.00	636.76	655.31	651.04	657.21	0.004083	11.91	5071.04	719.84	0.53
DnStmCanyonLake	1472642	1pct	PC	41400.00	635.23	654.98	644.57	655.53	0.000931	6.38	8156.63	637.22	0.26
DnStmCanyonLake	1472642	1pct	EC	41400.00	635.23	654.98	644.57	655.53	0.000931	6.38	8156.56	637.24	0.26
DnStmCanyonLake	1471819	1pct	PC	41400.00	631.94	653.25		654.40	0.001933	9.65	5729.90	446.27	0.38
DnStmCanyonLake	1471819	1pct	EC	41400.00	631.94	653.25		654.40	0.001932	9.65	5730.88	446.29	0.38
DnStmCanyonLake	1470621	1pct	PC	41400.00	628.85	651.60		652.46	0.001264	6.55	6834.67	488.11	0.31
DnStmCanyonLake	1470621	1pct	EC	41400.00	628.85	651.60		652.47	0.001263	6.55	6836.24	488.13	0.31
DnStmCanyonLake	1469746	1pct	PC	41400.00	625.71	650.51		651.35	0.001265	8.70	7000.25	482.29	0.31
DnStmCanyonLake	1469746	1pct	EC	41400.00	625.71	650.51		651.35	0.001264	8.70	7002.22	482.32	0.31
DnStmCanyonLake	1469150	1pct	PC	41400.00	625.51	649.86		650.60	0.001158	7.99	6945.44	449.75	0.30
DnStmCanyonLake	1469150	1pct	EC	41400.00	625.51	649.86		650.60	0.001157	7.98	6947.58	449.78	0.30
DnStmCanyonLake	1468558	1pct	PC	41400.00	626.47	649.19		649.89	0.001203	7.86	6995.58	436.49	0.30
DnStmCanyonLake	1468558	1pct	EC	41400.00	626.47	649.19		649.89	0.001202	7.86	7001.82	436.52	0.30
DnStmCanyonLake	1468095	1pct	PC	41400.00	627.91	648.23		649.20	0.001714	8.84	5852.63	406.83	0.35
DnStmCanyonLake	1468095	1pct	EC	41400.00	627.91	648.24		649.21	0.001712	8.84	5855.26	406.92	0.35
DnStmCanyonLake	1467590	1pct	PC	41400.00	627.11	647.32		648.34	0.001668	8.65	6154.81	445.17	0.35
DnStmCanyonLake	1467590	1pct	EC	41400.00	627.11	647.32		648.35	0.001666	8.65	6158.34	445.24	0.35
DnStmCanyonLake	1467196	1pct	PC	41400.00	624.98	647.10		647.74	0.000941	7.03	7395.54	482.73	0.27
DnStmCanyonLake	1467196	1pct	EC	41400.00	624.98	647.11		647.74	0.000940	7.02	7399.58	482.79	0.27
DnStmCanyonLake	1466687	1pct	PC	41400.00	622.39	646.33		647.18	0.001164	8.21	6912.17	485.70	0.30
DnStmCanyonLake	1466687	1pct	EC	41400.00	622.39	646.34		647.19	0.001162	8.20	6916.83	485.79	0.30
DnStmCanyonLake	1465655	1pct	PC	41400.00	623.73	644.81		645.74	0.001685	8.67	6305.69	452.81	0.35
DnStmCanyonLake	1465655	1pct	EC	41400.00	623.73	644.81		645.75	0.001681	8.66	6311.74	452.73	0.35
DnStmCanyonLake	1464757	1pct	PC	41400.00	619.77	644.32		644.79	0.000562	5.72	8936.63	504.72	0.21
DnStmCanyonLake	1464757	1pct	EC	41400.00	619.77	644.34		644.80	0.000561	5.72	8943.93	504.82	0.21
DnStmCanyonLake	1463953	1pct	PC	41400.00	621.75	642.85		643.99	0.001779	9.14	6069.40	455.49	0.36
DnStmCanyonLake	1463953	1pct	EC	41400.00	621.75	642.85		643.99	0.001779	9.14	6078.04	455.55	0.36
DnStmCanyonLake	1462818	1pct	PC	41400.00	621.16	639.95		641.45	0.002745	10.28	4981.18	411.34	0.44
DnStmCanyonLake	1462818	1pct	EC	41400.00	621.16	639.95		641.47	0.002767	10.32	5121.78	477.75	0.44
DnStmCanyonLake	1461780	1pct	PC	41400.00	614.23	638.01		639.19	0.001584	9.44	6310.47	408.93	0.35
DnStmCanyonLake	1461780	1pct	EC	41400.00	614.23	638.01		639.19	0.001584	9.44	6310.47	408.93	0.35
DnStmCanyonLake	1460654	1pct	PC	41400.00	611.79	636.06		637.34	0.001740	10.12	6399.16	393.96	0.37
DnStmCanyonLake	1460654	1pct	EC	41400.00	611.79	636.06		637.34	0.001740	10.12	6399.16	393.96	0.37
DnStmCanyonLake	1460120	1pct	PC	41400.00	613.08	635.15		636.35	0.001878	9.49	6278.09	445.02	0.37
DnStmCanyonLake	1460120	1pct	EC	41400.00	613.08	635.15		636.35	0.001878	9.49	6278.09	445.02	0.37
DnStmCanyonLake	1459535	1pct	PC	41400.00	613.29	632.78		634.81	0.003475	11.86	4359.33	332.26	0.50
DnStmCanyonLake	1459535	1pct	EC	41400.00	613.29	632.78		634.81	0.003475	11.86	4359.33	332.26	0.50
DnStmCanyonLake	1458991	1pct	PC	41400.00	611.66	631.90		633.13	0.002076	9.56	5995.80	420.44	0.39
DnStmCanyonLake	1458991	1pct	EC	41400.00	611.66	631.90		633.13	0.002076	9.56	5996.80	420.44	0.39
DnStmCanyonLake	1458799	1pct	PC	41400.00	611.90	631.60		632.70	0.001981	9.15	6495.15	482.29	0.38
DnStmCanyonLake	1458799	1pct	EC	41400.00	611.90	631.60		632.70	0.001981	9.15	6495.15	482.29	0.38